

```

1  atgaagtctg gctccggagg aggggtcccc acctcgctgt gggggctcgt gtttctctcc
61  gccgcgctct ctctctggcc gacgagtggg gaaatctgtg ggcccggcat tgacatccgc
121 aacgactatc agcagctgaa gcgcctggaa aactgcacgg tgatcgaggg cttcctccac
181 atcctgctca tctccaagge cgaggactac cgaagctacc gcttcccaa gctcaccgtc
241 atcactgagt acttgctgct cttccgagtc gctggcctcg agagcctggg agacctcttc
301 cccaacctca cagtcatccg tggctggaaa ctcttctaca actacgcact ggtcatcttc
361 gagatgacca atctcaagga tattgggctt tataatctga ggaacattac tcggggggcc
421 atcaggattg agaagaacgc cgacctctgt tacctctcca ccatagactg gtctctcatc
481 ttggatgcgg tgtccaataa ctacattgtg gggacaagc cccgaagga atgtggggac
541 ctgtgtccag ggacattgga ggagaagccc atgtgtgaga agaccaccat caacaatgag
601 tacaactacc gctgctggac cacaatcgc tgccagaaaa tgtgcccaag tgtgtcggg
661 aagcgagcct gcaccgagaa caacgagtgc tgccaccgg agtgectggg cagctgccac
721 acaccggacg acaacacaac ctgctgggcc tgcagacact actactacaa aggcgtgtgt
781 gtgcctgcct gccgcctgg cactacagg ttcgagggtt ggcgtgtgtt ggtacgcgat
841 ttctgcgcca acatccccfa cgctgagagc agtgactcgg atggcttcgt tatccacgac
901 gatgagtcca tgcaggagtg tccctcaggc ttcattccga acagcaccca gagcatgtac
961 tgtatccctt gcgaaggccc ctgccccaaa gtctgcggcg atgaagagaa gaaaacgaaa
1021 accatcgatt cgggtgacttc tgctcaaatt ctccaaggat gcaccatcct gaagggcat
1081 ctgcttatta acatccggag aggcaataac attgcctcgg agttggagaa cttcatgggg
1141 ctcacgaggg tgggtgaccgg ctacgtgaag atccgccatt ctcacgctt ggtctccttg
1201 tccctcctga agaaccttcg tctcatctta ggagaggagc agctggaagg gaactactcc
1261 ttctatgtcc tagacaacca gaacttgcag cagctgtggg actggaacca ccggaacctg
1321 accgtcaggt ccggaaagat gtactttgct ttcaatccca agctgtgtgt ctccgaaatt
1381 taccgatgg aggaagtgcg cggaaccaag ggacgccaga gcaaagggga cataaacacc
1441 aggaacaacg gagagcgagc ttctgtgaa agtgatgttc tccgtttcac ctccaccacg
1501 acctggaaga accgaatcat cataacgtgg caccggtacc ggccgccgga ctaccgggat
1561 ctcacgact tcacagtta ctacaaggag gcaccattta aaaacgttac ggaatatgac
1621 gggcaggatg cctgtggctc caacagctgg aacatgggtg atgtagacct gcctccgaac
1681 aaggagggcg agcctggcat ttactgcat gggctgaagc cctggaccca gtatgtgtc
1741 tatgtcaagg ctgtgaccct caccatgggt gaaaacgacc atatccgtgg ggccaaaagt
1801 gaaatcttgt acattcgcac caatgcttca gtcccttcca ttcccttaga tgtcctctca
1861 gcatcaaact cttcctctca gctgattgtg aagtggaaat ctccaactct gcccaatggt
1921 aacttgagtt actacattgt gaggtggcag cggcagcccc aggatgggtta cctgtaccgg
1981 cacaactact gctccaaaga caaaataccc atcagaaagt acgccgatgg taccatcgac
2041 gtggaggagg tgacggaaaa tccaagaca gaagtgtgtg gtggtgataa agggccatgc
2101 tgcgcttgcc ctaaaactga agctgagaag caggctgaga aggaaggagg tgagtaccgt
2161 aaagtctttg agaatttcct tcacaattcc atctttgtgc ccaggcccg aaggaggcgg
2221 agagacgtca tgcaagtggc caacacgacc atgtccagcc gaagcaggaa caccacggta
2281 gctgacacct acaatatcac agaccggag gagttcgaga cagagtaccc tttctttgag
2341 agcagagtgg ataacaagga gaggactgtc atctccaacc tccggccttt cactctgtac
2401 cgcacgata tccacagctg caaccacgag gctgagaagc tgggctgcag cgcctccaac
2461 ttcgtctttg cgagaaccat gccagcagaa ggagcagatg atatccctgg tccggtgacc
2521 tgggagccaa gaccgaaaa ctccatcttt ttaaagtggc cagaacccga gaacccaac
2581 ggattgatcc taatgtatga aattaaatac gggctgcaag tcgaggatca gcgggaatgt
2641 gtgtccagac aggagtacag gaagtacgga ggggccaac tcaaccgtct aaaccaggg
2701 aactatacag cccgattcca ggctacctcc ctctctggga atgggtcatg gacagatcct
2761 gtgttcttct atgtccccgc caaacgacg tatgagaact tcatgcatct gatcattgct
2821 ctgccggttg ccatectgct gatcgttggg gggctggtta tcatgtgtga tgtcttccat

```

FIGURE 1A

```

2881 agaaagagaa ataacagcag gttgggcaat ggagtgtgt atgcttctgt gaaccccgag
2941 tatttcagcg cagctgatgt gtacgtgcct gatgaatggg aggtagctcg agagaagatc
3001 accatgaacc gggagctcgg acaaggggcc tttgggatgg tctatgaagg agtggccaag
3061 ggtgtggtca aggatgaacc cgaaaccaga gtggccatca agacggtaaa cgaggctgca
3121 agtatgcgtg aaagaatcga gtttctcaac gaggcctcgg tgatgaagga gttcaattgt
3181 caccatgtgg tccggttgct ggggtgtggt tcccaaggcc agccaccct ggtcatcatg
3241 gaactaatga cacgcggtga tctcaaaagt tatctccggt ctctgaggcc agaagtggag
3301 cagaataatc tagtcctcat tcctccgagc ttaagcaaga tgatccagat ggctggagag
3361 attgcagatg gcatggccta cctcaatgcc aacaagtctg tccacagaga ccttgctgct
3421 aggaactgca tggtagccga agatttcaca gtcaaaattg gagatttcgg tatgacacga
3481 gacatctacg agacggacta ctaccggaaa ggcgggaagg gtttgctgcc tgtgcgctgg
3541 atgtctcccg agtccctcaa ggatggtgtc ttcactactc attctgatgt ctggtccttc
3601 ggggtcgtcc tctgggagat cgccacgctg gctgagcagc cctaccaggg cttgtccaac
3661 gagcaagtcc ttcgtttcgt catggagggt ggccttctgg acaagccgga caactgccct
3721 gatatgctgt ttgaacttat gcgcatgtgc tggcagtata accccaagat gcggccctcc
3781 ttcttgagga tcatcggcag catcaaggat gagatggagc ccagcttcca ggaggtctcc
3841 ttctactaca gcgaggagaa caagcctccc gagccagagg agctggagat ggagctggag
3901 atggagcctg agaacatgga gagcgtccca ctggaccctt cggcctcctc agcctccctg
3961 cctctgcctg aaagacactc aggacacaag gctgagaatg gcccgggccc tggcgtgctc
4021 gttctccgcg ccagttttga tgagagacag ccttacgctc acatgaacgg gggacgcgcc
4081 aacgagaggg ccttgccctc gccccagtc tgcacctgct gatcctcgga cacaccgaag
4141 cacgcgcaaa cagtaacgtg tgtgccccac tcggtgggcg gggggggcggg gaggggagag
4201 caggttgtaa caatctattc acaagcctcc tgtacctcag tggatcttca gacctgccat
4261 tgctgccac gggagacggc ttctctgcag taaacacatt tgggacctc cttttttcaa
4321 tatgcaagca gctttttatt tcctttaccc gaaccttaa ctgacatggg cctctgcaaa
4381 ccttaatgac aacacttaat agcaacagga cactcgagaa ttgagtctct tcgttctctg
4441 cctttttctc tcctctgcct tccctctctg cctctctccc ttccacttcc acgctctcct

```

FIGURE 1B

```

1 mksqsggggsp tslwglvfls aalslwptsg eicgpgidir ndyqqklrle nctviegflh
61 illiskaedy rsyrfpkttv iteylllfrv agleslgdlf pnltvirgwk lfynyalvif
121 emtnlkdigl ynlnitrga irieknadlc ylstidwsl ldavsnnyiv gnkppkecgd
181 lcpgtleekp mcekttinne ynyrcwttnr cqkmcpvcg kractennec chpeclgsch
241 tpdnttcva crhyyykgvc vpacppgtyr fegwrcvdrd fcanipnaes sdsdgfvihd
301 decmqecpsg firnstqsmv cipceggpcpk vcgdeekktk tidsvtsagm lggctilkgn
361 llinirrgnn iaselenfmg lievvtgyvk irhshalvsl sflknrlrl geeqlegnys
421 fyvldnqnlq qlwdwnhrnl tvrsqkmyfa fnpklcvs ei yrmeevtg tk grqskgdint
481 rnngerasce sdvlrftstt twknriiitw hryrppdyrd lisftvvyke apfkntveyd
541 ggdacgsnsw nmvdvdlppn kegepgillh glkpwtqyav yvkavlttmv endhirkaks
601 eilyirtnas vpsipldvls asnsqqlliv kmnpptlpng nlsyyivrwq rqpqdgylr
661 hnycskdkip irkyadgtid veevtenpkt evcggdkgpc cacpkteaek qaekeaaeyr
721 kvfenflhns ifvprperrr rdvmqvantt mssrsrnttv adtynitdpe efeteyppfe
781 srvdnkertv isnlrpftly ridihscnhe aeklgcsasn fvfartmpae gaddipgpvt
841 weprpensif lkwpepenpn glilmyeiky gsqvedqrec vsrqeyrkyg gaklnrlnpg
901 nytariqats lsgngswtdp vffypaktt yenfmhliia lpvailivg glvimlyvfh
961 rkransrlgn gvlyasvnepe yfssaadvyp dewevareki tmnrelgqgs fgmvyegvak
1021 gvvkdepetr vaiktveaa smreriefln easvmkefnc hhvvrllgvv sqggptlvim
1081 elmtrgdlls ylrslrpeve qnnlvlipps lskmiqmage iadgmaylna nkfvhrdlaa
1141 rncmvaedft vkigdfgmtr diyetdyrk ggkgllpvrw mspeslkdgv ftthsdvwsf
1201 gvvlweiati aeppyqglsn eqvlrfvmeg glldkpdncp dmlfelmrnc wqynpkmrps
1261 fleiigsikd emepsfgevs fyyseenkpp epeeemele mepenmesvp ldpsassasl
1321 plperhshgk aengpgpgvl vlrasfderq pyahmnggra neralplpqs stc

```

FIGURE 2

```

1  getcattcat ttccactccg catttctgce cctcgccggc ctcgcccggc cccgggactt
61  cggaccagtc tcgccaactg cgtcgcgctc tcccgcgcgc taggctccgg tggctcgttcc
121 ctccggggat cgggtggcgt ttgtcctcgc ctgcccgcgat ttgggctttg ctctcttttc
181 tgtacagttt tcctccttct tctgcatctc tgcgtttgca aatggaggcc gacgacgccg
241 acagcccgcg ccggcgccgc cgggtctccc gactccgcgc ccccggtggg cgctgctgccc
301 ggcgctgagg ggccgccccg cgcaccctc cttgtccacg ccgctttccg aggatcgctc
361 cctgcgctct tgtttttgga cgagagttag gactgagttg gagacttttt ttttcttttt
421 ttcttttctt tttttttttt ttttctattt ttgagaaaag ggaatttcgt cccaaataaa
481 aggaatgaag tctggctccg gaggagggtc cccgacctcg ctgtgggggc tctgttttct
541 ctccgcccgc ctctctctct ggccgacgag tggagaaatc tgtgggcccg gcattgacat
601 ccgcaacgac tatcagcagc tgaagcgctt ggaaaactgc acggtgatcg agggcttctt
661 ccacatcctg ctcatctcca aggcgagga ctaccgaagc taccgcttcc ccaagctcac
721 cgtcatcact gactacttgc tgccttccg agtcgctggc ctcgagagcc tgggagacct
781 cttccccaac ctcacagtca tccgtggctg gaaactcttc tacaactacg cactggctcat
841 tttcgagatg accaatctca aggatattgg gctttataat ctgaggaaca ttactcgggg
901 ggcctcagg attgagaaga acgcgcacct ctgttacctc tccaccatag actgggtctt
961 catcttggat gcggtgtcca ataactacat tgtggggaac aagccccga aggaatgtgg
1021 ggacctgtgt ccagggacat tggaggagaa gcccatgtgt gagaagacca ccatcaacaa
1081 tgagtacaac taccgctgct ggaccacaaa tgcgtgccag aaaatgtgcc caagtgtgtg
1141 cgggaagcga gcctgcaccg agaacaacga gtgctgccac ccggagtgcc tgggcagctg
1201 ccacacaccg gacgacaaca caacctgcgt ggccctgcaga cactactact acaaaggcgt
1261 gtgtgtgect gcctgcccgc ctggcaccta caggttcgag ggctggcgct tgtgggatcg
1321 cgattttctg gccaacatcc ccaacgctga gagcagtga tccgatggct tctgttatcca
1381 cgacgatgag tgcattgcag agtgtccctc aggttctatc cgcaacagca cccagagcat
1441 gtactgtatc ccctgcgaag gccctgccc caaagtctgc ggcatgaag agaagaaaac
1501 gaaaaccatc gattcgggtga cttctgtcca aatgtcccaa ggatgcacca tcctgaaggg
1561 caatctgctt attaacatcc ggagaggcaa taacattgcc tccgagttgg agaacttcat
1621 ggggtcatc gaggtgggtga ccggtacgt gaagatccgc cattctcatg ccttgggtctc
1681 cttgtccttc ctgaagaacc ttctgtctcat cttaggagag gagcagctgg aagggaacta
1741 ctcttctat gtcctagaca accagaactt gcagcagctg tgggactgga accaccggaa
1801 cctgaccgtc aggtccggaa agatgtactt tgctttcaat cccaagctgt gtgtctccga
1861 aatttaccgc atggaggaag tgaccggaac caagggacgc cagagcaaag gggacataaa
1921 caccaggaac aacggagagc gagcttccgt tgaagtgat gttctccgtt tcacctccac
1981 cagcactgg aagaaccgaa tcatcataac gtggcaccgg taccggccgc cggactaccg
2041 ggatctcatc agcttcacag ttactacaa ggaggacca tttaaaaacg ttacggaata
2101 tgacgggcag gatgcctgtg gctccaacag ctggaacatg gtggatgtag acctgcctcc
2161 gaacaaggag ggcgagcctg gcattttact gcatgggctg aagccctgga cccagtatgc
2221 tgtctatgtc aaggctgtga ccctcaccat ggtggaaaac gaccatatcc gtggggccaa
2281 aagtgaatc ttgtacattc gcaccaatgc ttcagtcctt tccattcccc tagatgtcct
2341 ctgagcatca aactcttctt ctcagctgat tgtgaagtgg aatcctccaa ctctgcccaa
2401 tggtaacttg agttactaca ttgtgaggtg gcagcggcag cccaggatg gttacctgta
2461 ccggcacaac tactgtcca aagacaaaat acccatcaga aagtacgccg atgggtaccat
2521 cgacgtggag gaggtgacgg aaaatcccaa gacagaagtg tgtgggtggtg ataaagggcc

```

Figure 3A



```

2581 atgctgcgct tggcctaata ctgaagctga gaagcaggct gagaaggagg aggctgagta
2641 ccgtaaagtc tttgagaatt tccttcacaa ttccatcttt gtgcccaggc ccgaaaggag
2701 gcggagagac gtcattgcaag tggccaacac gaccatgtcc agccgaagca ggaacaccac
2761 ggtagctgac acctacaata tcacagaccc ggaggagttc gagacagagt accctttctt
2821 tgagagcaga gtggataaca aggagaggac tgtcatctcc aacctccggc ctttctactt
2881 gtaccgcata gatattccaca gctgcaacca cgaggctgag aagctgggct gcagcgcctc
2941 caacttcgct tttgcgagaa ccatgccagc agaaggagca gatgatattc ctggtccggt
3001 gacctgggag ccaagacccg aaaactccat ctttttaaag tggccagAAC ccgagaaccc
3061 caacggattg atcctaattg atgaaattaa atacgggtcg caagtccagg atcagcggga
3121 atgtgtgtcc agacaggagt acaggaagta cggaggggccc aaactcaacc gtctaaaccc
3181 agggaaactat acagcccga ttcaggctac ctccctctct gggaatgggt catggacaga
3241 tcctgtgttc ttctatgtcc ccgcaaaac gacgtatgag aacttcatgc tgtatgtctt
3301 tgctctgccc gttgccatcc tgctgatcgt tggggggctg gttatcatgc tgtatgtctt
3361 ccatagaaag agaaataaca gcaggttggg caatggagtg ctgtatgctt ctgtgaaccc
3421 cgagtatttc agcgcagctg atgtgtacgt gcctgatgaa tgggaggtag ctgcagagaa
3481 gatcaccatg aaccgggagc tcggacaagg gtcctttggg atggtctatg aaggagtggc
3541 caagggtgtg gtcaaggatg aaccggaaac cagagtggcc atcaagacgg taaacgaggc
3601 tgcaagtatg cgtgaaagaa tcgagtttct caacgaggcc tcggtgatga aggagttaa
3661 ttgtcaccat gtggtccggt tgctgggtgt ggtatcccaa ggccagccca ccctggtcat
3721 catggaacta atgacacgcg gtgatctcaa aagttatctc cggctctctg ggccagaagt
3781 ggagcagaat aatctagtcc tcattcctcc gagcttaagc aagatgatcc agatggctgg
3841 agagattgca gatggcatgg cctacctcaa tgccaacaag ttcgtccaca gagaccttgc
3901 tgctaggaac tgcattgtag ccgaagattt cacagtcaaa attggagatt tcggtatgac
3961 acgagacatc tacgagacgg actactaccg gaaaggcggg aaggggttgc tgcctgtgcg
4021 ctggatgtct cccgagtccc tcaaggatgg tgtcttctact actcattctg atgtctggtc
4081 cttcggggtc gtccctctggg agatcgccac gctggctgag cagccctacc agggcttgtc
4141 caacgagcaa gttcttcggt tcgtcatgga ggggtggcct ctggacaagc cggacaactg
4201 ccctgatatg ctgtttgaac ttatgcgcat gtgctggcag tataacccca agatgaggcc
4261 ctccttcctg gagatcatcg gcagcatcaa ggatgagatg gagcccagct tccaggaggc
4321 ctccttctac tacagcgagg agaacaagcc tcccagacca gaggagtgg agatggagcc
4381 tgagaacatg gagagcgtcc cactggaccc ttcggcctcc tcagcctccc tgcctctgcc
4441 tgaaagacac tcaggacaca aggtgagaa tggcccgggc cctggcgtgc tcgttctccg
4501 cgccagtttt gatgagagac agccttacgc tcacatgaac gggggacgcg ccaacgagag
4561 ggccttgccct ctgcccagc cctcgacctg ctgacccctg gacacaccga agcacgcgcc
4621 aacagtaacg tgtgtgcgcc cactcgggtg gcgggggggc ggggagggga gagcaggttg
4681 taacaatcta ttcacaagcc tcctgtacct cagtggatct tcagacctgc cattgctgcc
4741 cacgggagac ggcttctctg cagtaaacac atttgggacc ttcctttttt caatatgcaa
4801 gcagcttttt atttctttta cccgaacct taactgacat gggcctctgc aaacctaat
4861 gacaacactt aatagcaaca ggacactcga gaattgagtc tcttcgttct ctgccttttt
4921 ctctcctctg ccttcctct ctgccctctc cccttccact tccacgctct cct

```

Figure 3B

**FIGURE 4**

```

ID 5: 1      agagtggccatcaagacgggtaaacgaggctgcaagtatgcgtgaaagaatcgagtttctc 60
            |||
ID 6: 56632 agagtggccatcaagacgggtaaacgaggctgcaagtatgcgtgaaagaatcgagtttctc 56573

ID 5: 61      aacgaggcctcggtgatgaaggagttcaattgtcaccatgtg0gtaagaagccaagatgag 120
            |||
ID 6: 56572 aacgaggcctcggtgatgaaggagttcaattgtcaccatgtg0gtaagaagccaagatgag 56513

ID 5: 121     acatggacagaaagtatggacagaaaggaccaccctgtatgtccttggccagctacggaa 180
            |||
ID 6: 56512 acatggacagaaagtatggacagaaaggaccaccctgtatgtccttggccagctac-gaa 56454

ID 5: 181     ttggtgccttgccctcttcccgagtggttagtttccccggtgcattcttggcaccacaga 240
            |||
ID 6: 56453 ttggtgccttgccctcttcccgagtggttagtttccccggtgcattcttggcaccacaga 56394

ID 5: 241     cccttgagggtgggagcctcgccctcgccctcccaccagaactctgctcctgggtacaggg 300
            |||
ID 6: 56393 cccttgagggtgggagcctcgccctcgccctcccaccagaactctgctcctgggtacaggg 56334

ID 5: 301     cccagcaccacccagttccgagaggcgtaggtcatcatgtgggatgccccctccccctc 360
            |||
ID 6: 56333 cccagcaccacccagttccgagaggcgtaggtcatcatgtgggatgccccctccccctc 56274

ID 5: 361     tgagtccttttcttgattcctccag0gtccggttgctgggtgtggtatcccaaggccagcc 420
            |||
ID 6: 56273 tgagtccttttcttgattcctccag0gtccggttgctgggtgtggtatcccaaggccagcc 56214

ID 5: 421     caccctgggtcatcatggaactaatgacacgcggtgatctcaaaagtattctccggtctct 480
            |||
ID 6: 56213 caccctgggtcatcatggaactaatgacacgcggtgatctcaaaagtattctccggtctct 56154

ID 5: 481     gaggcc 486
            |||
ID 6: 56153 gaggcc 56148

```

FIGURE 5

```

1 gaattccaga tggaaagctga cttcctgctc agccctatta aaaaaaaaca caggctttcc
61 tgcctctgag ccccttcgcc acaaataact tgagtgccat gcacggagggt gccacttgt
121 ggcttaggtt ctctcagacc ttgtttgtcc ttcagcccct tggggaggag cccaggctac
181 cacctgctgt ccctaagcct aggaccaggt ggagaccatc gaattgcaga tttagacaga
241 attaaccatc acagggcctc ataccatcct ttttaaagga ccaggccttg atggagactg
301 cagtcgccaa ccccatgggt gcttttgcta ctatggaaac actgaaataa ccaacacaca
361 cactggttgt ggatgccact gaacacacac acacacacac acacacacac acacacacac
421 tggttgatgc ctctgaaccc caaaagggtca gcctggaagg aatgggtggct gctctgtcct
481 ccatctcagc cgcacatctg aagtcacccc agccacaggc acctgtcatt gtcacagctg
541 gtccctatgg gcttactctt tcctcacgat gctcttattt ttagtcagac accaaagcgc
601 tttattttatt tttagttaga cacatttggt acatttcaag ttttccaact tgtattcgat
661 aaagggaaac aaaggattcc tgtcacctgt cctaattgaa agcttctttg ataaatactt
721 tcggacagtg attcatacta tcagccttcc aaaaggagga aggaaaaaaa aaaaaaagaa
781 aagaaaagag cattcttttg agacactctt attcccttgc acttctgatt tgtttttttt
841 tttttttttt ttatttcggg tccagagatg gaatggctca aattacattt gacgtcctca
901 ggaaaccata ctcttggtaa aagcagtgcc tgtctcaaat gaaatatggg catggaaatg
961 tgctgcccc tcttggaact acgtctttcc ctacatttct ctcacagcc agcagttgct
1021 gggagtcagg cgccattggg aaatgccac tggatcccag agtgtggcct gcctttatta
1081 gtaatgtttt gagtttgccg gaggacagac tottcatttt attggagccc ctagtgtgt
1141 aaatcttgtc ttgacaactg gtatgtagac agatggtgaa atgcaaggat tctaacaaac
1201 agcctttaga ttaagggtgt ggctgggacc aacagtaaaa tgagagacca ggcgaacctg
1261 cagtcctccc cagggttcga tgaattctac acattttctg gctgactacc caactctatt
1321 ccaaggcagt cttgatggg aatgaggctt agcccagcaa aacaagacct tctaaccttg
1381 ctcccgagtg tgtctttcct aatttaaaac aaacaaggat gtagtttctt caaagctgaa
1441 tgtgggttcta aagtgtgtga aatgtgtgtt gatgggtttt taatgatcct agaggaagct
1501 ggcttctcgg tctttctact taatctcaac attttctaa cgttcttta gagctgcagg
1561 tteccacagc agctgcaaga ctgtgtatcc tatcagtcaa agccagatgg tagtcttgag
1621 atgggtggg attctgttga aaagctttct gtcccctgaa gtttttctcc ctaggaacca
1681 atcctgatga tgggccacga ccaatacact cagcagttgc caggcacagc tggatcccct
1741 ctccagtgct gctacctact ctagaggccc tggggtccag cgacttgatg tagcatcctg
1801 atcttttaca gactggaaag tgtggcaact gagaagtatg cgctgagagt caggtgaggg
1861 actcaaacc tcagtcatac tccagataaa actgatcagg acgatgtcga accctacctg
1921 cagcccaagc tgagatgagg ctccctcct ctcagtctga catgctagcc tccccagga
1981 ggaggccaca catttttcat tttagaaata tagatcaaga agaaattgta aagaaagaga
2041 actccttgca aatctcacta gggttgcctg atgctgacat cttcaatgtc caatccaatg
2101 tactaacatc agtacaatta agaaagagag aagcagagag agggggagaa ggaagggag
2161 gagaacggga tggaggggtt gaggaatgag tatgtgtgca cgtgcacaca gaccgtcta
2221 tacaatttag accagtgcaa ggcttctctg aattgcctcc acctcaaaac gccttcccct
2281 gctactccca ccttagcttc ttccgcactt tcttcccca ttttaacacg tgggtgtcctt
2341 ttcagactca tttggctgta ataaaatc cagaaaacaa acaaacgaca aaggataaag
2401 gaggtttatt ccgtttacaa ttccagggtta cagtccatcg tgggtgggaaa gtcagcagca

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FIGURE 6A

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2461 ggaacttcag agaattggtc gcatcacatc cacagtcaag agcagagaga aatgcataca
2521 tatttgctgt cttgtttgct ttctcatgtt cagcttggat ttctccattc ttttatagtt
2581 caggactcaa tgcctaggga atgacactgc ccatagtga ctgggttccc ccacatcaat
2641 taacaagaat tgttgaggaa ttgggttggc ttgtggacat ggtttttttt tggaggatta
2701 tcttagtta gctaattgat ataagcagaa ccattcccta ggcaatgatt ggcctgtggg
2761 catgtcaaca tttcctagga atgttggcct gtgagtatgt ctgtgccac aagtaagaca
2821 attggcta atgatatgaga aggccagcc cactgtaggt ggtaccattc cttaggctgg
2881 agatccttga gctgtaggag agaggagaaa tcaactgag cacaagcaag tgagcatgtg
2941 tgcattcttc tgctctttga ctgtggatgc tatgtgactg ttgtttgaag tctgcctca
3001 actttccac agtgatgggc tataacataa ttatatgctg aaatgaattc ctctctcctc
3061 taagttgctt tcgttgttgt ttttattaca gcaacagtta aagtagaaca cttatttaaa
3121 acctatggaa ggatatatag atagtttaca gctttagagt tgtagagtg gagaacacta
3181 ctgtaaacag tagtttccag ttctgagatc agtggccagg tgtatcatgt tttactcagtc
3241 cactttcagc tctaaaaaaa aaaaaaattg gggctcagcg gttaagagca ctgactgctc
3301 ttccaaaggc cctgagttca aatcccagca accacacggg ggctcacac caccataac
3361 ataacaaggc ctgatgccct cttctggagc ttctgaagac agctacagtg tactcacata
3421 taataataat aaataaatct tttttttaa tctatcacca tattgcaaag tagtgtcttc
3481 cattcctatc aatatgtgag acccagtttc tcattcttct tttgtttgtt tgtttaagat
3541 tttattttatt cattgtatgt atatgagtac actgtagtgt tacagatggt tgtgggcat
3601 catgtcattg ctgggaatta aattcagtag ctccgctggc tccggccccc ctggctccag
3661 cccaaagatt tattttattgt tagacctttt aaatatatca cataatagtc tttatacaat
3721 agataagtg tttctcagta ataacctctt aacagagttt ttatttttta ttttaacag
3781 agttttttaa agagccaaca ttcttaactc tgtggctgta tttttgcttg tctttttta
3841 aaacaagctc ttgggtgggt gtagtgacac ctttagtcc cagcagatac tggcagatcc
3901 ctatgaactg gtcgagagag caagttacag aaaagtcaag gttacacaga gaaaccctgc
3961 taactaaggc tgagatctgc tatgtctaga tggcttatct gagctcagtg caaatggag
4021 gactctatac catctgggct tccccctctc tgacctgtc taggggactc cctatactct
4081 ctacctggga aaggtcaagt agcctcggaa gaccaacaaa cttcctcttt tccgcagaag
4141 aaccaccca acaagtaccc gggattcctg aaatgcctct ccatacaaat gaggaattcc
4201 aagaacttta aactctaacc aatgattttc atttaccctg aaaactcctt cacactctcc
4261 aaggctcctg tttaccccaa ataaagtgt ttcgtacaag cccacccta gtagaggtat
4321 ggaggtatgc tcacaaacca agatcggcta agagagctgt tttcattgaa gattgttggg
4381 gaaggccttc ttctaaaaga gctgtaactc taagatcctt cgggaaggcc ttctctccct
4441 tccccccct tccccccact agcactcact ccagcagga ccctaactct gtataaccct
4501 cccccccccc ccattctgga cactgtttca tccttcccac ccagtgtgca gtggcatctg
4561 gatacctccc tgactatgtt tcatacagtc aattctgagg aagccccag attagcaagg
4621 ctgaggttct ctggggccta tagaacttgt tgccaggtga tagaacttgt tactgggtag
4681 tgtgggctgg tttgagcaaa cctgggtatc tttggtttca ggttttgggc ccttccggca
4741 gcacctagtg aattccagct ggggaagccgt gaaggtaaat cctgccgttt gccccccccc
4801 cccccccccc ccggggccaac ctggttcctt ctgtggctct tgggaaaccc caatgccaat
4861 gcgcgggact cctaagaaac cagagtcacc ttggaaggaa ggcaagcagt gggcccttgg

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FIGURE 6B

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4921 aagaaaggct tgtatattggt cctggaatgg tgtgacttgc ctggtcaggt acttctctcg
4981 tttgtccagg gacactccta ggtgggacca aggcccatgt aggctctact ctacgtaggg
5041 ctagattctt gccctctctt cctttggatg tggggctctgg ggaaagtcac tttcaccagc
5101 tcttgtcctc acctacgcat gcggaagtga taacatggat gtctctggcc tccactgaca
5161 gctcaggggtg agggcagcct tgtccacact gctctgtgtg agcccagcat ggggcgtggg
5221 tgagaacctg gccagtgtc gtgactgtcg acagcacgct tgcttttgag gacatagcta
5281 accaggagaa ggaagtcc ctccctaggt caactgtctg ccatcagtc tcatgtgggt gtcacttaga
5341 ccacccccac ctccctaggt gcctgtctg acttggcttt caacttcaca ctgatgttgg
5401 ggctctgcga attgaaagct gctgttctg tctcagagtt tcccaggcca gctgagaaac
5461 accaagccaa atgtggggcc tggagtctat tctcagagtt tcccaggcca gctgagaaac
5521 gcagcaaaagc tgctagcgtc atgcactcac agccaccgtg gcaactgactt tgtgggtctga
5581 caacgcagag gcaggcagga gactcttgat ccttgagtta gcatattgggc ttttgccttt
5641 ccaatcataa aaaagcccag agacccttgg actcattgcc aagccttgct ctggtacaca
5701 aggtaacaga gaggccagga ccagactttc atgagctcct ggctttctgc aaccagtatt
5761 tgatcagcag gacttctgcc aagtcctcag tagtcccaga cccttttggt tctttctgca
5821 gccgtaaaca atggaaaaga gccagactgc ttctgggttc tggtttgct ctcagtttcc
5881 ccagtgtcaa gtagtggcat tcaaaaacct tgctcgagtt ttgatgcctc cgtttccaa
5941 tttaaataaa tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg
6001 agttgaggaa gtcacatgac atcccaaaga cctcttgggc atgctgatag agctcacagg
6061 ttgtccattc ccaccaggag gcttttctgt ttgtctggta cacagctgca gacacatggg
6121 atgaggggtca gatcagcaca ggaagtggca gaaggagag gggtacctga ggtgggtggg
6181 aaaccccagt gcttgggact gctagtaatc aaagtcacct tggagggaag gcaagccagt
6241 gaccactgga agaaaagttt gtctttggtc cttgggtggg gtgacttgac tggtcaggta
6301 cgtcttccat gtgtgcagta aagaaaagtg gctaaggagg ctcaaggctc attaagcttg
6361 gtgaagcaaa ccagacagac acagggactg gggcttgctt gaaggcatat agtcagacat
6421 gcagacagcc aaggatagct ctgaaaagtg cacacacata cactcaca tgactatac
6481 acacacacac acatacacta ttcctacaca catataccac aaacactata cacataccac
6541 acacatacac tcacacacac tatacacaca ccacacacat atactacat atactatac
6601 cacacacaca tgactacac acacatatat acacacatac actctcactc aggagctata
6661 ggctgaggaa agcaagcata cactggaatg gcaggtaagg acaaaatctg tgttaagggc
6721 tggaggtatg gcttagttag tagagaactt ggttgcatgc atgtgggtct gggtaacatc
6781 ccagcactac ataaaatcag gcatgggtgt atacctagta ctagggaagt agaggcagta
6841 gaattggaac ttcaaggcta tgctctgact gctgcagact ctcatggagt ttttgtgaga
6901 attttaaatt caaattcttg gtttggcatg gtgacccatg cctttaatcc cagccagcat
6961 tcaggaggta gaggcaggca gattactgtg gggttaaggc tagcctggtc tgtacagtga
7021 gttccaagac aggaatatat agagagagac cctgtttcag aacaaacaaa aataaaactc
7081 aaacttctta caaagaaatg tgaactatca gttcctagcc taagatcacc tgatacacia
7141 gaaaataaaa taccatgtta aaaaaaatca gtagatgccg ttttaaaaaa cagaattata
7201 accaggcagt ggtggcacat gcctttaata aaccagcac ttgggaggca gaggcaggca
7261 gatttttgag tttgaggcca gcctggttta caaagtgagt tccaggacag ccagggtctac
7321 acagagaaac cttgtctcaa aaaatcaaaa aaaaaaaaaa aaaaagata gcagtctgag

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FIGURE 6C

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7381 aaattagaac tatagctgac ttaaaagaca gcttagatct gtggtcagtg aaagatactg
7441 ctcacaagag actgtatcac ttgagtcac ttgcattaat gtccctagta agtaaataata
7501 ttgagagagg aagtaggtta gtgataggct aagggtggaag gacacagtaa atgaaatgtga
7561 agtttcttta aagtacattt atttatttgt gtgacctgt gtgtgtgtgt ctgtctgtct
7621 gtgcacacca tggcttgccc atgaaggcca aaggacaaca ggtaggaagg agctagaact
7681 ctcttccccc tgtataggac ctagggaatgg agctcacccc agacatcggg tttgggcatc
7741 aggaaccttt accccgagcc tctcacatac ttcttttagga ttcttttaggt tgttaattcaa
7801 aggctctggc accgattgcg gtgatgggtg gttgtataac tcttgatggg gatgggtata
7861 taactgagca tactgaaaga tgtggagtta aatagggtta gtacgtggaa tgtgaataag
7921 ctatctctta ggagatagat gatagggaaga taggatagat agatagatag atagatagat
7981 agatagatag atgtgattag atagatagat agatagatag atagatagat agatagatag
8041 agatagggtga tagactttac ccacatgtac acatatatag ctgttcagaa acagacgaag
8101 agaaattagt aaactagaat atagatatgg agatattatt caaaggacaa tataaagatg
8161 ggcaaacaag catagagggg ataattgtaa tagtaaaagga agtttctgtt taaatagaat
8221 tccagaggaa aataacagcg agaattggaag aaaaccatct tcaaatatac agctacaatg
8281 tatgggattg gaatagggtt ggtcccatag actcctgtgt ttgaatgctt ggcccacaag
8341 aagtggcact gttaggaggt gtggccttgt tggatgtttg accttgggtg aggaagtata
8401 acactgtagg ggcagacttt gaagtctcct atgctcacgc tatgccatt gtggcacacg
8461 gtctcctttc tgttgctgt ggatcaagat gtagaactct tgggctgggt agatgggtca
8521 gtgggtaaga gcacccgact gctcttccga aggtctggag ttcaaattccc agcaaccaca
8581 tgggtggctca caaccacccg taatgagttc tgatgccctc ttctgggtgtg tctgaagaca
8641 gctacagtga acttacatat aataaataaa taaataaata aataaataaa taataaatct
8701 ttaaaaaaaa aaagatgtag aactctcagc tccttctcca gtgctatgtc tgcctggatg
8761 ttgccttgct tcctgctctg acaataatgg agtaaacctt tgaaattgta agccagcccc
8821 caattaaatg ttttccttta taaaagttga cttgggtcatg gtgtctcttc atagcaatgg
8881 aaaccctaac aaaggcacia tgggttaagaa tattccagag ggactggaga gagatggctc
8941 agtggttaag agcactgttc ttccagaggt cctggagtgc aatccccagc aaccacatag
9001 tggctcacaa acatttgtaa tgggatctga tgccctcttc tgggtgtgtct aaagactgta
9061 ctcacattca taaaataaat aaatctttta aaaaatttcc agaactgatg aaatacttga
9121 atccacagag atagaaataa agaaaatcca cacctaaaca tagtagagtt ggagactgca
9181 aaagactgat taaggcttta gagtagccag agaggagatg gcttacttac aaaaatggat
9241 actctaacta gtagtctagg gctaacttct tcaaaaatag caatacaagc tcaaaagcag
9301 tacagtaata acctacagaa tgccaaaatt gtagctgctg aacagaaacc gtgtagctag
9361 gagatcattc ctcgagaata aggctggggc tggagagatg gcttcgtggg taggagccct
9421 tagcgggtat gctcttctctg aggacctgcg tcaattccca gcgcccacgt caggtagttt
9481 ccaactgcct ttgatcccag ctccaaagtg aacctctaac ctttgggagc acttgcggtc
9541 acgcaagtga acacatacct ccctatacac atacacataa ttaaaataaa aaataaatct
9601 tttttttttt ttttaaagaa taaggctgga gtaaaaacat tttcacaata ataatgtca
9661 ggtttactct cagaaggatg acacaagggg actgtaaaaa ggacacttgt cagaagagaa
9721 gaaaattatc acaaaaatgg tgtcttagtc agggttttat tgctgtgaag agacactgtg

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FIGURE 6D

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9781 aacacagaat tgggggtggc ttatagtttc aggggttcag tccattattg tcatgacaag
9841 aaacatggag gtaggcaggc agacaaagga caggagaagg agctgcgagt tctacatctt
9901 gatccacagg cagccatagg agactatatg ctatactgtg catacctcaa gcataagaga
9961 cctcaaagtc actatgggga atgcttgccc catagtgact caattttctcc aacaaagcca
10021 tacctatcca acaaggccac acctcttaat atagtgtgga atagtgtgctc tccctatgga
10081 ccaagcattc aaacacagga gtctagagtc ttatgagggc cattcctatt ccaaccactg
10141 cagatgggat agaaatcact gggaagcctg gcagtgggtga cgcattgcctt taatcccagc
10201 acttgggagg cagaggcagg tggatctctg agtttgaggc cagcctggtc tacagagtga
10261 gttccaggac agccagggtc atacagagaa accctgtctc aaaaaacaaa aaaacaaaaa
10321 caaaaaaaca aaaaaacaaa caaaaagaaa gggagggagg gatgaaggga gagagagaga
10381 gagagagaga gagagagaga gagagagaga gaaagaaatc actgggaaat ggtgagtctg
10441 agggtagaaa tctgtaccag caccaggcag tgatggcaca cacttttaac cccagtactc
10501 aagatctggt ggatgtctga gttaaaggcc agccttatgt acagagttag ttccagatca
10561 accaaggcta catagaaaaa ccctgtcttg aacatcaaaa caataaaca acataaagtc
10621 catatcagca ttgtttgtaa catgtaatag tagtagttcg taattccagg atggaactaa
10681 aattcacaa acgtcaaagg catctccacc atctcttcag tgacagggtc tggagcaggc tctgctcaat
10741 acttcaaagt catctccacc atctcttcag tgactagaca cacctgcac gccacctgga
10801 cttcttgctt ttaataggac caaaggatgg tgactagaca cacctgcac gccacctgga
10861 aagttaggtt cccgagatgg ctggctatgc ccaggtctt ggtacccag ttggccttcc
10921 ttttggcccc tggactctag gtcttgcatc tattctccct tccttgtgtt cctccttgg
10981 acagagttag ttgcaaaactc tttgctgtca atgtgcaggg ttgtttgtgc cccaggggtc
11041 aacttaggtt atcctgtgtc ctgtctaaca cctcagtggg ctctattttt ggttcagcat
11101 cttcctatct ggttttcagt agtcactgaa agtgctggca aacagttaac agtgtcttta
11161 gtaggaatgg ttatctaagg gaccatacta ggtaaagggc tgagatactt catatacata
11221 gcataacctg actgctgtaa agatagaaaa acagactgag atgccctaca cagtctgtgt
11281 ctgtataagc tacacacttt ctgtaatggc caacatcaat ttatctttat cccatagagg
11341 gcctggcctg gagcatgtgt tccagggtact gaatcatttg aggtaggagt gaatactttt
11401 ctttctatcc tcttgcatcc ttccagtaaa attaaagctt atcgctatca tgtatgttcc
11461 caagcaatgt ttaattatct gtaaaaagct ttgtatctga gactgcatgg attacagatg
11521 ggaaaggaaa aaaaagtgtt tatttccaca gtgtctcact tccaagaatg gggtagagta
11581 ttgacaaacc atcacacgaa gacatttttt tttaaagatt tatttattta ttatatgtaa
11641 gtacactgta gttgtcttca gatacaccag aatagggcat cagatctcat tacgggtggg
11701 tgtgagccac catgtgggtg ctgggatttg aacttcggac cttcggaaga gcagtcgggt
11761 gctcttacc cactgagccat ctcaccagcc cgcacattat ttttttgggt gcagccactc
11821 ataaatggga gaagaatgtt gaaaggaaaa gaaaatgtag gggctggaga gatgggtcca
11881 tggttaatag cactgactgc tcttaccgag gtcctgagtt caattcccag caaccacatg
11941 gtgggttcaca accatctgtt acaggatctg atgccctcct ctggtgtgtc tgaacacagc
12001 aagtgtgtgc tcacataaaa taaataaatc ttaaaataga aaaaagaaaa gaaaatgcag
12061 aaaaataata tgaagtctaa aagttcacag cgaaagaggc attttctgca aagttcccaa

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FIGURE 6E



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12121 gcaagtgact ccatgctgtt tgttgatcag cattgtgagc cctcgtgttt aacattgagc
12181 taccatac tccacaagcc caacgctcct tcagtgcacat atgcagcagc tgcacatca
12241 ttgcccatac tctagattct aagctctagg tgtggtggtt tgaataagga tggctcccat
12301 agactcatgc cagggaatgg cattaggagc tgtggcctcg tgggaggaag tatgtcactg
12361 aggggtgggct aataatatag aagttagtag caaggactgg ggtttttggc gccctaggct
12421 ggaccaagtt tcttggtgga atgtggactt tggattagga aaatagttga atggttcaag
12481 tagagcatca caggccatac tggtaagacc atggaagatg gtgctgttgg tgacatgaat
12541 tatgggggtac acagggtttta gaggagaaga attgtaggcc tagatttttc aaaccctact
12601 ttttaataagg gttcttaaac gctttatcct ctcttctagc ccaccaccca ccagagggag
12661 tggaaaggaa aggttaatag agcaaaggag ggtgtggatc tgtttagaaa aagtctttg
12721 gagcaaatcc aatctgtgtt accaggatat cagcagtaca gttcactcag aacagcagca
12781 gcagctcgat ccacttgcaa acaccattca tgaatcagca atggcaggctc aatccagaa
12841 aaacctcgag gctctgcaa gtacaaggaa gcagcagcaa gaagctgcca gaaagaacac
12901 caccagaagt tcttttgtgg catttctgtc tatgaagtca tatcaaatga tgactagcaa
12961 agaatggcaa ggcaagggtgc tggtagatg gcttagcagg taagagcact gactgtctt
13021 cccaaggtag tgagttcaaa tcccagcaac cacatgggtg cttacaacca tcgtaatgag
13081 atctgatgcc ctcttctggg gtgtctcaag tcaactacag tgtacttatg tataataata
13141 ataaataaat taaaaaaaaa aagaatggca aaccaaaacc tacagcttca tcagcgaaga
13201 ccagtgtag caaaacccaa tgataaccag caaatatata tatcctttcc aaacatcaca
13261 ttcttgttct ctcaagtgtc agcttttagc aaacatcaca tgccctttgc ctagactgct
13321 tctagaaaac caccgtgtat ctgttctcag caaaacatcc tcccacatgt ctgcttcagc
13381 aaaaacatcc tctcataaga cagtttccag aaaaacatca catgacatga ctgcctctcc
13441 aaagaagcca gaaatttcca attcaaagag tactagtatg caacctagag accattcttg
13501 tgatattttg acaaagatca tgggtacatt ctgctcttgt catgcacaca gacacacaaa
13561 tctgcctgag gttaaataga agagttatga atgaacatct ttagaagatt tgtctctaag
13621 agatttccaa aaagtttagt attgactttg ttgcttgggt attagtgaac atacttatgc
13681 agatctgtaa cgaagaggac caagctaaac aaggaacata cagaatgtac agtttgagga
13741 gaaaaggagc ccagggaagt gtaatggagt caagtccagt gcttgaggag ataaacctga
13801 tgttaaatgg aaaggagaag tggtagacct aagccaggac tccacctagc taagcttcca
13861 acttctgaga agtaatcaaa gaaaagttta gaactgggtg tagctgaatt accttgaatg
13921 ttagcagcac tcatgagaca gaggcagcag gcaggctact gagttcaagg ccagcctggg
13981 gtacagatgg ggttccagga cagccaagct taggcagtga aggaaaccac tgaaaacaga
14041 aagctgggta agatggattt gaatgaagag gcacattcca ggcccagcag cagcagaact
14101 tggtagcttt ggccatattg ctctggcttt agagtggagg gtacaaaaaa aagagttatg
14161 gaatctccct ccgtgactaa ggaaagctga tggggccagg tgtgtgtcag ggatgtttct
14221 gcatggagac ccagagacct ttgcttaaaag ttgtgcagggt aaaaacctgg attgttgtga
14281 tagtttgaat gcttggccac agggagtggc actattggga ggtgtggcct tattgaacga
14341 agcgtggcct tgttagagga agtgtgtcac tgtggaggca ggactttgaa gtcataatatg
14401 ctcaagctct gttcagtggt acatacatc tccttctgat gcctccagat caatatgtaa

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FIGURE 6F

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14461 aactctcagc tectccagca caatgtctcc ttggatgctg ccatecttcc cgccatgatg
14521 ataatggagt gaacctctga aactgtaagt cagccccaat taaatgttat gagttgccat
14581 ggtcatgggtg tctattcaca gtgatggaaa acctaactca gacgattgcc ccagaaagcc
14641 cccaagatgt tggatatgcc agagtcatgg gatttgtgaa gagggatgct gttaacaggg
14701 agtggaactg gcccaagaga aataactgtg ttgcagtcaa caaagttgaa aagagttgga
14761 gatctgaaga ctgctttgac atcaggcacg gagatgcaga gtttggagtt tacacagctg
14821 ttttttggtc ttgcttttgt ccagtatttc cccttctctc ccttttggga tggatgata
14881 tatcctgtat atgttggaag tatgtgatct tgattttgat tttattccag atcatagtta
14941 agagcttgcc ataagtctta gaacagactt tggactttta agcaggggta agactgatag
15001 actatggaga cttttgaggt aggattgagt gcatttctgg attatgataa agctacaagt
15061 ctgtggggac tgggatgtag aatgtggtgg cttgaaaaag aatggccccc acagacacat
15121 acttgaatgt ttaaggggta tcattagaag gtgtggcctt gttggagtag gtgtggcttt
15181 attagaggaa gtatattatt ggggtttgggg ggtggtgagc tttgggtttt gtttttggg
15241 atgcctgtat gaggaggtca gatcttttga gactggagtt acaggcaatt gtaagctgcc
15301 atatgggtac tgggaattga acccaggtcc tctggaaaag cagccagttc tcttaaccac
15361 tgagccatct cttcagtccc gttccaatga atttttgaga agcttttcta gaagtgcctg
15421 aaccagaga gacaataaaa acagttgttc tcaacctgtg agttgagaca ctttgggggg
15481 ttgcatatca gatatttatt tacattgatt cacaacaatt gtaaaacttt cagttttgaa
15541 gtcgcaatga aataatttta tgggtggggg tgtcattaca acatgaagaa ctgtattaaa
15601 gggtcacagc attaggcagg ttgagaatca ctgcaacaaa agaagaattt tgtgccaggt
15661 ggtagtgcc tgtgtcttta atcccagcac tcaggaggca gaggcaggca gatctctgag
15721 ttcgaggcca gcctggtctt tagagtgagt tccaggacag ccaaggctat acagagaaac
15781 cttgtctcaa aaacaaaaca aaacaaacaa acaaaaataa ggtatttgta aaacataccc
15841 tagatccggt gtgctaagac ataacagcat tccaaatata catagcccaa gtagccaagg
15901 ggtagagct cttatcagct ttgatgagct tgatataagg ggaatttccc tttatcccca
15961 aagatgaagt ggtcttaacc ttcttgcatg ctgtttgctt gttagttaat aggtttattt
16021 ttattttatg tatgtgtgtg ttttgcttga atatatgctg tgtaccttaa gtgtacttag
16081 tacatgagga gtccagaaga gggcgccaca tcccacagaa ctggagttac agatggttgt
16141 gagctgctgt gtgggtgcta ggaatcaaac ctgggtcctc cagtgtcttt aactgatgag
16201 ccatctctcc agccccttcc atgattcttt aaaaagcagt catagtgaag agagtacaag
16261 gttgtgcatc aggacagtaa caccaccaat ccatttctgt aacaagtcag agtaagatga
16321 cagatcttcc aaagggacac cagcaactgt ctggggcctt cctgtaggtc cccctaaact
16381 tcactttagt ctggagaaat tccagggctc tcagattact ccagagagct agaaagagaa
16441 gcttttcttg tctcgttttc cgtttgtgtt tataacataa acttttattt atttatttat
16501 ttatttattt atttatttat tatatgtaag tacactgtag ctgtcttcag aactccaga
16561 agaggagtc agatctcgtt acggatgggt gggagccacc atgtggttgc tgggatttga
16621 actcgggacc tttggaagag cagtcagggt ctcttaccac ctgagccatc tcaccagccc
16681 tataacataa acttttaatt tcaactggga gacattcaag cagaggtccc aagttctatc
16741 actcagaaca catatacaga tctggacata ttgacatgca catgaaatgc aatggagata
16801 gagagacaga aggatccctg gtacttgctg gccaccacga ctggtagaac cagcaggctc

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FIGURE 6G

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16861 caggtagctt cccaaccatt tctccatctt tgggtccatt gttgcctgtc tgaatatctt
16921 tgcagatagt ttttagaggg gaaatacagc aagtaagcag aatgggtgcag ggtagagcct
16981 gcacctggaa agtggagaaa catcctagag agacacagcc ttgcaaggct ggtccagggg
17041 gtgggagctg tacagctgtg actgcagatg tcagcacaga tgctgggtac ctgattcatg
17101 gcaaccacag gttgggaggg cccctacaga tgttggagcc ccagggtctga caatcccagt
17161 ggggtgattt gtgacgtttg taataagatc agatgtgagg gtagagggtga gagagagggc
17221 ccaggtagcc ttctagacct gtctttggaa tctgagttca gactggacat tttgggggct
17281 catttccaga gtcactctcc tgtgctctgc tcccatattc atgagaagag cactcccatg
17341 ctggcagaac atgaggccca ggaagaagac atggggctct ccataactca accccagaga
17401 cctagtgcc aagcaattatt gctcatagca gccaaaaaca tgtaagaaac tgccccattc
17461 tggcgaaaaga gtaagatgca tttgactgtg actgtcacc attgtcagga ggccaaagca
17521 tttcttttagc agctcctcga gtcaatgaaa tactgagtgt actgaggacg agggcagctg
17581 atgtccttcc tcactctgtg tctcagtga cagagggtcaa ccaggatcca aaaagcagta
17641 ttatgtggaa actcccagaa agaaaccaga aaggagtttg atggtcacga gactggacac
17701 actgccagag tcgctgtggc agcgtcagca aaagttttca agtgacttcc acggaagcat
17761 atttacgacg acgtacagaa gaagggcagc tacttaacag atgccacat accttttaga
17821 acagctaata agtcacagat gcctgcggtc ctcccagaac agaggggctc tagtagtcag
17881 gcctcacaca ggaggcagga agaaaagcat gcaggaatca aacctagacc taaagtataa
17941 gatgaacatc caggagccta aaccactcta aagaaaatta catagatcct ctatgtaaat
18001 taaggagcag gagagtgagc ttttaagttg ttctgcaggt gcataaatta tgcaggcact
18061 tcaggcccta tggagaactt aaccctctc ctcagatgct ggctgcacgc ggacttctc
18121 ccacaggacc cctgctatga agtgagtgca ggaaagaacg ttttatagtg aagatgcctg
18181 agagacttcc aggccagggt atccaagtca acacctacag tgacaagtct tgttgatggt
18241 ttgtaccctt gaaatattat catgagaagg gcaactctat cctctagagt cttctgcccc
18301 caaccctaaa gcccagtcct atctgagacg agaaggagac agattccagg gaaggcacac
18361 gctctacagt gtctggccag tgttccatag aaccggcaaa gtcattaaac acaagaaaga
18421 actgtaggag atggaacaat gtgttgtgat gacctagatg gaccttaaag gactgctctg
18481 tgtgtgtgtg taactaagga acctgggtaa acgatgcggt ccttaccact cttctatcca
18541 ttaaaatggt tatcatgtct cttcgtgggt gtgcacgcct tttaatccca gcactcagga
18601 agcagagaca agaggatctc tgagtttgag gccagcctgg tctctagagt tcagggctac
18661 acagaaagac cctgccttga aaccaaccaa ccaaccaacc aaccaatgaa ccaccataa
18721 cccacagatt tttgttgggt gtgcttttgt tggaaacctc ctctcttttc tcagttttaa
18781 gactccagaa ccgaagttag aacagctggg catgttactg tgtgcttggg atcccagcaa
18841 tgggggaagag gagacaagac tttcctggca cttattggta agctagccta acttacccta
18901 ggtgagctcc gggccagtga gagactctgt attaaaaaaa aaaaaagtgg atgttaaaag
18961 acacctaaag ttgtcctctg gcctccacat gcatgtacag acatatgcac acatgtgtgt
19021 gcacacatga ctgtttctc ttgtttatca cctgtcctta tgatttgaga gaactgtagt
19081 aggcctttcag atacagaagt ggattggctt ggttaaaaaa cttagttcca ctactggcct
19141 gtgtaaaaga tggggaatct ctgctgagct aagccatgca ctatgagaac agtctctctc
19201 caggccagac ctctacaaaa aaatcccaa caacaacaac aacaacacca ccaccaacaa

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FIGURE 6H

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19261 caccttttgca ggaaggtggt ggtaaaggcc ctagtttaaa aatgggtgta catatacaca
19321 ccatgaagtt cagagagtcc attcgcaaca ttatttgacc ttcagcacga tttgtttctg
19381 gaactttccc accccattct tgccctcggtc ccccagggtcc tggtagactgt tattattttg
19441 tatccatact gttgcacagc aagtgtctag aactttctga atctgcagaa cagactcgct
19501 actgatttaa ccatggcctc cctccccca ccttcccct ccccttggtc tctgctgacc
19561 accactctac ttcccatctc tccctcggtg gctgttagct acttagtgga agtggaaacca
19621 tattgacttt tgtgactggc ttacttggct tagtataatg ttttcaaggt tcaacctagt
19681 cattgagtgc accagtacat tcctaaacc ctggcactca ggaggctaag gtaggggaac
19741 ccagaccaat ggttttcaac ctctctcggtg ttgcggtgac cccacacaacc atatttctgt
19801 tcttacttca tagcagtaat tttgctaata ctatggatca tagtacaat attttggag
19861 atagaggttt gccaaagggg gtctcaatcc acagggttaag aacttctgat ttagactttt
19921 agttcaggcc aaattacaca ytgagagcct atctctttca tttcctaatt tgaagaaaag
19981 aaagaggggg ggagggaggg agggaggggg ggggaaggga gggagggaag gggaggaggg
20041 aaggagggga gggaagggag ggagggaagg gagagagaga gagagagaga gagagagaga
20101 gaaagaaaga gagaaagaaa gggagaaaaga gagaaaaggc taggcgtgat gcagctcact
20161 gcagctctgt gagacgcagg caggctccatg gtcttcccac ttcagccgcc tagtgaattt
20221 gaggccagcc tgagagataa gagaccctgc ctttaaaaaa caaatagac aatcagctta
20281 gtgggtaaaa gtgtttgtga ccaaagctgc caacctgtgc tggatcccca gaaccacat
20341 ggtggaagga gaaaaccagt tcctgcaagc cctccacgtt gtgagccatg gcatgcaggc
20401 atcctcagac agacagacag acagacaaaa tgaataagta cattaacatg tttaaattaa
20461 aaaatggaag gggcagaaag ggggaagggaag cagatggggt cttttgtttc tttgtttgt
20521 gtgtgtgtat ttatgtatat atgtgtgtat atgtatgtat gtatgcatgt atatgtat
20581 gtattagaga caaggtttct ctgtgtagct ctgactgtcc tgaaacttgc tctagggatg
20641 aaatgcatgc acccccctcc ccagctgaa actgacagtc tgattcccta ttgtgcttgt
20701 gtttcttacc agttcatcct ctgctggaca cttggatggc atcttctatg ccactgtgaa
20761 cagagctgca agctttcatt ttgggggtat atactcagaa gtgggggtac tgggtcatat
20821 gaccagtcag agattgttta gtaactacca agttctctac atatttagaa atactatttc
20881 ttcttcttct ttcttcttct tttcttcttt cttccttctt cttcttctct ctcctcctcc
20941 tctccttctt tcttcttctt cttccttctt tcttcttctt ctttcttctt tcttcttctt
21001 tcttcttctt ctttcttctt tcttcttctt ctttcttctt tcttcttctt tcttcttctt
21061 ctctcttctt cttcttctt cttccttctt tcttcttctt cttcttctt cttcttctt
21121 cctcctcctt cttcttctt tcttcttctt tcttcttctt cttcttctt cttcttctt
21181 tcttcttctt cttcttctt tcttcttctt tcttcttctt cttcttctt tcttcttctt
21241 tctcctcctt cctcctcct ctcctcctcc tctccttctt ttttaagctt atgtgtacag
21301 gtgttttgtc tacatgtata tcttgcacac cagaaaaagg cactggattc catgggacta
21361 cagttacaga cttgggaggc atgggggtgc tgggtcttga actcagggtcc tctggaagaa
21421 cagtgtctct aaccactgag ttaactctct ggctccaata tttcatctct ctctctctct
21481 ctctctctct ctctctctct ctctctctcc ctctcctcc ctcctcctcc tctctctcc
21541 ctctctctct ttctttttta ttttttattt ttctacttat tttcaatagc agccacctcc

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FIGURE 6I

21601 acagatacaa agttctctga ataggccata aaaatctgag cttactcttg agtaatatgt  
 21661 ggtgaatgga cggcagagca tggccttctg tcttgcttgg tcctcacaca ggacacaggt  
 21721 cctcagacag gcccaggacc ctagagctcc tttgggggag gggacacagt ggtgctatga  
 21781 aagcctgtct tcttctactt actctcagtt cattataaag catttcaacc tgttaatggg  
 21841 ttccaggggtc atactattct gccttaatta aactaatccc cacattatga tcaagaaatc  
 21901 ccataaaaaat gatctgtaac aacatcacac ataggagata aaatgaatta atgtgaatca  
 21961 cacggaaatg aggaatgaca attcctgtga ccctcccaga ggcccttata aaccatagga  
 22021 aaaaaaaaaag agctgacatg ttgatccaaa tagaggaaag aattaggaaa agcagttaag  
 22081 gaaagaaaga ggcccttaca gatttacatc tgcccagataa agccactcc aaagcaggag  
 22141 tcttgcatga gtgccatgta ccctaactac agagcagcag gggagagatg ctgaagtgtg  
 22201 cactgtgccc tgtgtcatcc agtcagtggt caggcatgcc acgtcaaaca tttttattaa  
 22261 cggggcacat gatcagaaat atttggagac agtgactgga tagagagtcc ctgtcattca  
 22321 tcctggatct tccaggcaag actgacacat cagtttggaa gaatcacata acagatctg  
 22381 gaagagggcg ctggcaagca gcctatgtgg aggatagaac ttgacagcac tcaggcagag  
 22441 tcacctttaa ccaacacctc aggatttctt cccaagctcc cctctgtatc tcttttgacg  
 22501 ctgcttcttg aaatgtcttc cctctaattg tgtccctgtg gactttggct gtcccctgtg  
 22561 taggatgggt ttggtatcga ctgttctcga ggctgcgggg aggagatact tagcagagtg  
 22621 ccaagagtcc tccaggggca gcctcggatg atgaccggac tattcattaa ctcagaaaaa  
 22681 aatgggtgct ggaagcatct taccaagtgt agttgtctg cgctcagggt atgctcgggg  
 22741 tatgtagtgt ttctgtcgtt atgcttccct tctcagagga gttcagttct catggctctt  
 22801 gtaacgtcag tgttacattg ttttaatggc tacatcattg ccaccaatgg ctagcctctc  
 22861 ctctgtctac cagccctttc ctttctcttc ttcagtgtg ggctggaacc caagactttg  
 22921 ctcatgctag actaggcaag ctactcagcc ccagccttgt ttcatttgt ctcttcacaa gcctggatgg  
 22981 atatgcccgg tgagctctcc caggtctggc tttcatttgt ctcttcacaa gcctggatgg  
 23041 tggtggatag ctgatggccc ccgggtctct tctctccctt cagggcaagg ggaacatgtg  
 23101 atctctctct ctctctctct ctctctctct ctctctctct ctctccctct ccctctccct  
 23161 ctccctctcc ctctccctct ccctctctca ttgttactcc tgcttgtgga gccaaagcaaa  
 23221 gaaaatgacc actgaacagt gaccacgtga caagttgggg aaagataagt agaaaagggg  
 23281 gcgagaagag gggaagggaa ggagaggtaa gaactatgca aagaaaggaa gaaaaggaa  
 23341 agaaagggga gggggagaga aaggaagcag ggaggaggac ctctgtacac ctccaaacta  
 23401 acccttcaag atccaaagag catcttcttc cctgtggccc tccagcggcc cggccttgct  
 23461 caactctcac agcaaccctg agcggagtgc ttgggtctgc attgcaccgg tggggaagcc  
 23521 gaggcctggg aggttccaac ctttgtctag aagcacctca tcctccgaga agatcagcac  
 23581 tgacagagag gtcaccacc tgcctctgag ggccacctcc ccagagccca gagaaggatc  
 23641 ttacctggga tctgtgggag gccatctaac ccagaaggca tgggggtgcc tggaaatgcc  
 23701 aggaaaggaa gtcaggaaca gctcaggcag aaatgaaggc acaaaatggg cccacattc  
 23761 ctggctgaac tgggatcaag agtgagcaca agcttctaag atctcaggct ttcttccctc  
 23821 caacctatct gctacttggc ctggaaggag gatgccca gccttccctg cctcacctag  
 23881 ccttccatca cctccttgcc cctctcctct cttcccttcc ttctgctttt ctttccctc  
 23941 caccctctcc ttttctttct cttcctccc ttctttcatt ttctctacc cttccttctt

FIGURE 6J

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24001 ccttttctgt cccccctccc aacaacaaca acaaatccat ggcttttgtt tctaaaatta
24061 tatccgcaca ataacctctc tgccaattcc aggcacacag agccaatgga ccagctccct
24121 ttggataatt caaattgacc ccaagatagc cctaccccac ttgtacctcc tccctttgtt
24181 taagagggtg ctctaagctc tttgtttcct gaccgaaatc cttccatggc ttcctattat
24241 cccagagaag tccacacctg actaagcatt ccaccagcg tctgcagcct tctcaagttt
24301 caatcccat ccttcctggg gtggagtgtc cctgttgtac ctttggtaga gatgactagg
24361 gactcatcag attacaccag gacagttgat gtttggatta gcagcagggg tgtgaggcta
24421 gatgcttatt tgccttgtgg catgcaggac acctgtcagc tgcggagAAC ggctcgccat
24481 accaatttcc cgaagggcct cgggctcttg tgcttccttc tgctatgatg ctagcctcgg
24541 ctgctgccac gtgtgttccc agcctcctgc tctggcccat cttcatctgt ccacagacct
24601 cagtgttgca aacatggctt cttcagatat gtctccctag ggtgcccccg cttcaggaag
24661 tacggctgag agagccatgg ctctttgggt cctggtcact ttgagttcct ccataccagg
24721 agggatgggt tggagctcag agaagaccct gggcatacag tcttgggtgc ccttgggtgc
24781 aggcaactaa ggcacctcac ccgctatatt ttgcaggAAC tttctaagct gggcttaggg
24841 gtggacactg acatagaact tcgaactctg cagctgcctg tggattacag ggaggtaaaa
24901 cggaggctta ccacaatctg ggaagatttt caaccacaag taagtgatac ctggagaggc
24961 tgtgggtctg ggaacctgat gatgggcccc gggcctagga actttctgga ccttgatcta
25021 gatttgaagg ctggagtaca cctgaattaa agcttctgtc gtgagattct ggggtctgtgt
25081 ataagtttat gctgaaacac gaggtagata gtaaaagatg actgggggca agtgggcccc
25141 acaaaatggg aatctgggtat taaagccagg aggactctag gatagctcac acctatccta
25201 aaaaaagaga ggcctgggat taagccctgt gtatggctaa ttctggctgt tctgaggaat
25261 ttaaggtaaa gcgctttggg cctaggaagg tctgatgatg attcaccag ggttgggtcca
25321 ctttcaaaac atcctgccag gggcctgggt tgatggctca cacttttaat cctggcacct
25381 gtgagtttaa ggccagcctg gtctagttta tgagttcaca gccccattcc aaactaacia
25441 aagtaactac atagtaactg aatataagca ctgtgtaaac aggggcacaa tgccagggtgt
25501 ggtagctcac gcctttaatc ccagcacttg ggaggcagag gcagggtgat ttctgagttc
25561 aaggccagcc tgggtctacag agtgagttcc aggatagcca ggactacaca gagaaaccct
25621 gtcttaaaaa acaaaaaaca aaaaaaccaa aaaaacaaaa caaaacaaaa aaaggacact
25681 gaccaaacac tgcagcaaaa tctctgcaa ctgttttcaa aagaggacaa ataaagtcta
25741 ataagattcg attagactgt tgctagcttc ctttatgaaa gtttcattaa atacaggatc
25801 ctgttaaaag ccagcatctc ccagggtcat cttggatact tgctttcccc caactcctgg
25861 ggggaaagag agcacacaac ctcggtagag ccatttgaaa tacaaaagtc ctttttaatc
25921 cagaaaaaat ggggaaaagt ccttaaagtc agatgtagca tgcctaattc aacccaaaga
25981 tgtgttcctt ttgtatcagc accattactt aggggcctaa gcagggtccc tggaggactt
26041 ggagctagat ctgttttagcg gggctctgtc atcactggac ctctcttcac atctagtgat
26101 ctgggtgtctg tcctgggatt tctgatatgt atgtccctac agcttgttgt gcatgtgggc
26161 atggactctt ctgccaaggc catctttctg gaacagtgtg gtaagaaccg aggctatcgg
26221 gattcagatg taagaggctt ccagccggag gatggagtgt gcctccccgg tggccccgaa
26281 gtgaggctgt ctgttgtcaa catgaaggag gtctgccggc gtgtggctgt tgagaatgtc
26341 gaagtggcct tttcccga ga tgccggcagg tacttcagga ctccgtgtgc caagtgccaa

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FIGURE 6K

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26401 acagatggga gagaggggatt atccttcaga gtcccttctc tctcctcaag aggctatcct
26461 atgttggtcca tgtgggtgct ttgggtcacag gcacccctatt tgtcacagge actgcagatt
26521 aattttaacct cttctccaaa cgctgacagc ccctcccccct aagcaccttt cctctcttct
26581 agggataaaag aaataccgga ggggagttgg cagtaaggga gtcattgtgg tgaagggtgc
26641 ttaccactag ttgtttgaaa ggccgggtca attctgtcat gaccgcttgc tggtcattag
26701 actctgagcc caagaaccaa tgtctgtctg gagtgttctt aggccatgtc ctttctctat
26761 cagaagagcc aaactcaagt ggtactaggc atgtgggcat ccataaactc atgcttcatg
26821 aaacctgtac ttactgtgtc tggcatcgac aagatctggg agtaatgggg agtttcatgt
26881 ggttgccagg acatctgcga ttacacctac tactgtctc tgcaccttgg gactgggcat
26941 gcggctctca tccatgtccc tctctgtcgt cactggctct cgccagcct tctgggcaaa
27001 gccttgccgag tcatcatcca agaaatgctg gaagaaatcg ggaaagtcca gactcaaagt
27061 acagcagctt aaggggaagca gcagggggat gccttcctta gatgaaatgg agtgtttcag
27121 gcttggacgg agaagccagc tgtgctatga gaggctctaa aaaaggggaa cagttacaag
27181 gctgggggtg ggggtggggg tgggggtgtg gactcacaga atcacaatct tacttttagt
27241 tctaaagcaa gaagaaaatc cccaaaggcg gatgcttcat aaaggattaa ctaggggaag
27301 ttatgacctt tgtaactcca aagagccacc aaaacctagt gtcaagacca aatgaactga
27361 ataactctca agtgttcttt gaaaaagatt ttattttatt gtttgtttgt ttgtttgttt
27421 atttattata caatgttctc cctgcatgta tgcctgcatg ccagcccagg gcaccagatc
27481 tgattataaa tggttatgaa ccaccatgtg gttgctggga atcgaactca ggacctctta
27541 agctctcagt catcttccct gctttgtttt gttttatttt gagacagggg ttctctgtgt
27601 agccccgcct ggctgtcctg gaactcacag aaatctgccg gattctgcaa gaaaatgact
27661 ttacaagatt tcctttgcaa ataaaccaag gacattttac atatgacaga gccaagccac
27721 actaaggcag atcaaagccc aaggtggaag ccgggcgtgg tggcacacac ctttaatccc
27781 agcactcagg aggcagaggc aggcagattt ctgagttcca ggacagcctg gtctacaaag
27841 tgagtgccag gacagccagg gctacacaga gaaaccctgt ctcgaaaaaa acaaaaaaac
27901 aaacaaaaaa agcccaaggt ggactgggat ggcacaggcc accagcacag aacctagctg
27961 cttggctggg gccttggctg gagaccctc tctgtgagca aagagctcct gctccaaacc
28021 ttaggtccct ttgttccagg agtgggctct agtgacactt caggctactt ggcacctggg
28081 cagacacatt aaaagaaaac gccgggcata cgcctttaaa ccagcactt gggaggcaga
28141 ggcaggtgga tttctgagct caaggccagg gctacacaga gaaactctgt ttcaaaaaac
28201 agaggcccag accccaaccc ccatgagcag ctcttccacc cctctgcgc ctctccagtt
28261 tctcaagacc ctaagcgccc atttgcattg tattttttgt aaatagcttg gcatcccccg
28321 acaatacaca ctgcatcctg ttcatgcaca gctgatagtg ggtgggttgt atgcttgcca
28381 gccagtgtag aacactgttt ttttgcgtgt catttaattg ttgggaggtc tgaagcatgg
28441 ctctgtgttc atctataaac ccgactaata aaaagtcttg gttctgacta ccagagaaat
28501 gtgtcaccaa caacacacca gccaaaaaaa ggaaagaaaa aaaagaaaaa ggtgtagtat
28561 gggccctcag cttgtggctt gaatatcttt ttttgttttg cttttttttt ttgggggggg
28621 ggtgaggtgg gtgggcagca gtatattatg aatctagcta gtaagcaggt gtttaaaaaa
28681 acgaataata aattaattct agaacgctcg taataggtga cttagctggg caggggtggc

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FIGURE 6L

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28741 acatgccttt aatgacaaaag ctccgtagga aggcaggtgg ctctctaagc tctaggacag
28801 cctgggtctac agagcaagtt ccagggtcagc cagggtctaca cagagaaacg ataatttcaga
28861 aagattaaaaa aaaaaaaagtg tctcagactc caaggagagc acctaactta aaaaaaaaaa
28921 gacttaattt tatgtgtatt agtgtaaagg ctgccatgta ggtgctggga attgaacctt ggtcttttgg
28981 actggagtta caattgtaag ctgccatgta ggtgctggga attgaacctt ggtcttttgg
29041 gagagcacac gtgctcttaa cctctgagca atctctcgat tcctaatagt cttttaagg
29101 tctagtacct ggctggagag atggctcagt gatttaagag tgccgactgc tcttccgaag
29161 atcccgagtt caccgagttc aaatcccagc agccacatgg tggctcacia ccatccgtaa
29221 gaaatctgat gccctcttct ggggtgtcct aagacagcta cagtgtactt acatataata
29281 aataaatctt aaaaaaaaaa aaaaaaaaaa agtctagtac cttcatcctt aaaagcagct
29341 ggctccggcc aggcaggttt ttggtaaact ggaggcatag taccaatcca gtaggcaca
29401 gaaataagac cttcagcgtc atctagttaa gctccctggg catctggtaa acaaaacccc
29461 cggggcagga cgagattgga aggtgtgctc ttccaacgac cttttgacta taaatccaaa
29521 taccatttgg gttaggctac tgggaggctc actgggtctt gagttgcctc tgatttgctt
29581 ctgccacctt tgtctcatcg atcagttctt caccgggtgt cctgattttg tctactgagt
29641 ccccatctct cagtgttcag tgaggcggct acctactctc ccaggagtct agaattgatg
29701 gcttgggtga ttttccaacc caaaccttcc atcagcttcc catggcaaa atggagagcc
29761 agcatctcag agttacctgt gggcaacctt acgactcagc accttgcagc caggaaacagc
29821 ccgattttcc ttggttctct ctccagcacc ctcaggcacc ccaactgtga agcactacca
29881 aggacaggaa aatgcacgca gcacgcaagt ttctggcaac cccgccccac cccagactc
29941 acacatacca aagccaccct ggctttttgt caaccgaagg tccaggggcc aagcctgtga
30001 agcagccctg agacttgtgc ttcagcctc caacagcaat ttgcatttgg agaaacccgg ctgtcagttc
30061 gaaagtagct tcttcaaact tgacacacac acacacacac acacacacac acacacacac
30121 tcgtgctgag cattcccgag tgacacacac acacacacac acacacacac acacacacac
30181 acacacacac acacgaggct cagcttcccg gctgtcagtt ctcgtgctga gcattcctga
30241 gtgacacaca cacacacaca cacacacaca cagaggctt agcttccccga ggaagtgggg
30301 gatggttcca gagtgaagag gaaaccaact gggagacaaa ggtgcatata gaattctttt
30361 atttaactta atccatgtgg tactttaact actagaaaaa agcagagtaa tagactcaag
30421 tggccttagc ttttagccatt caaaatagac aaagtttctt ttttcataat gtaaagaatc
30481 ccgagtatgt cgcagtaaca ggaataaatt cttacaacag aatatacaaa aacattgaat
30541 tttttttcat ctactgattt tcttttatat ataaacagag ggtttttttt ttttaggaata
30601 atttatacac agaaagttat tttatgtaac aaattggcca tattattatc ttttttagac
30661 ttttttttct tttttttaag aaaaaattta acaagaaaac tcagaaatgc attattggcg
30721 atgtgtccgc tccatcgagc cttttgactt ttgttttgtt tttttaaatc ccagaggtag
30781 atgaactctg gcaaaactct tacttcaacc tctactggcat aggaagcaga caggggttgt
30841 caccaggcag gcacctactc cacctgtaca tgtgtctgca cactgccccaa caccacaag
30901 aaactgaaag accaaaccaa accacaaat ggttcccaga cctttttcct gcagtgttag
30961 aaagtcccat gtgttttcaa caacgggtatc ttgtggaacc agagagacat ggccaataat
31021 gcacgggggag ccaaaggaca tggatcttaa tttgaaaaaa gggggcgagg ggacacacat

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FIGURE 6M



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31081 tgtgggtttt gttaccagtt tgttctgtat tagaaaacaa tggaccttcg gcgttcgcca
31141 ttagatacag gtaggcacag cattcggttag gatctgagge acatgtgccc acgggctgca
31201 catcagagtc atgtgatcac tgtgaagcca ttccagtgtc ctgaaaccct cccatctcca
31261 tagtggttgca gagctaggac cagccatacc agccagatgt caccatggag tgccatctct
31321 ttgctgggtg gccacacact gctatttcca tggccagcag ttctttccat ctgtttgggc
31381 tgctacactc cacaggggaac agtgagtccc agataattcc tttcccagc aaagggttcc
31441 aagatcaaga tactgaagaa tacagaagta ctttttaaac cactggcatt ccttttgttt
31501 tgtttttatt tttatctgtt ttattttttt ttgttttatt tattttattt ttattttttt
31561 acaaaactaga gcagaaagca tgtgggaaag aggggtgaacc acaattgggtc ctggggagaa
31621 tttcttttta attaattttt ttaagttttt attttttatt tttggcatat tgtaaagcta
31681 gctagtaaac aagtgtcaaa aaagaaaaag gaaacaaaga gggggaaaaa agaccacaaa
31741 cacatatttt tgcacacaca gagagaaaaa aaaagtgttt ttaaattatt ttcggcaatt
31801 ataaactaca aacattttat aaaattatct tatgttctta caaaaatgca atgaaacatt
31861 gaattagttc ttgtaaacca gagcttcgtc aacgactacc cgtaatctac tggacttaga
31921 agccctattg aaaggataat gagtaattta aagaatgggt tactggaaag atgcagacac
31981 aaatgtggac acacaaatca gtgattatga agttctcaca gaaacaaaaa tcaaatcaat
32041 ccctaacgtc atgccccaga ccgacaactc atctgatgag tgtgatggag tctgagtcct
32101 tccgcacgtg acttagctct aaggagaagt ttccagagca ggatgccaag tgtcttatct
32161 gaaaccaa at gccacagtt gactccccag cctccacatg ctctgacacc ttcagacacc
32221 atcaagtcca aatatggtcc atgcttcttc caggcccttt aacctctgt cagcaattcc
32281 cgtcatgtca cgatgccggt taccaagggt gcctactgca ccgtcactct gtcatccat
32341 caaggaatgt tcgtttctct aaatcgccaa ctggtcatcc aagctggaag cccaaagcaa
32401 agacccttgg cctgtccaag gtctgtatct tcagcatctc tggcaagaga ggttcaattt
32461 tacacagaca tcctgtcttg aagtctcat ttgtaccacc acctagtcca aagtggactg
32521 ttaaaagttt gaccatcatc actggttctt aagggttggg tctctctggt ccaggtctcc
32581 caatgcagct gcttagccca ggaaatgaaa agacatcaga caaacataaa agtaacatta
32641 aaaacaaaaa ccaaaggga aaaaaaaatc ccaaaccgta aattcattac tgctaaaatg
32701 ggccaaagca ttttgatgga gtggctcctgt ctctccttgg atgccagtgt ttaggaaagg
32761 agatgctttc agcactctgt ggccactctc agaggaccca acgatgacaa cagagggcct
32821 tgggtaagca tcctagactc ctcaccaca tgagctcagt gtgacctgc caccactgct
32881 tgcttacctc aggcacagge actgcaaaa gaggtgggct gctaaggccg aggtccggg
32941 agctcaggct ggcttaggac ttggcatcat acagagctca tccatctgtc agccaccct
33001 aaaaactcct gtataccact ccgcatctg ctctctcac cgtgatcgct tttctagttt
33061 atgaagctgc ttttctacc gttgaacagt cccgagtcac aagaaacagg caggtaggaa
33121 aaagagcaac cttgaacagt cttttatata tcaaggaggg agcctcatcc catctctgaa
33181 tccaatgtta ggacattcct gaaaggagat ggcgaaagcg gggccccacc cagctcaggt
33241 tcagctctat ctccacgcct caggaagggc tgtgtggggg cacacctgga tgttcacgtc
33301 acctgcatgc tgtgcctcag tggttcatgt gacttcaagc agtgtgagct cctatcagaa
33361 ggggggggtg ggtgggggtg ggctcagagt aaaaaggcca cgactcagct tggtaggagt

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FIGURE 6N

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33421 acttgaagct tgtaaagaga aaaatcagga agaggcgggg aacatcagca tgagatcagg
33481 ctagaactgt ggatatgatg ccttgcaata gtcggggcgc gtcagtccag cagaacgact
33541 gcaccctcgt acaagccaac cttttctttt tattgaagtg tttctggagc attagtttat
33601 gacggccact acgctgttgg tgccgtctct ctacttaaag gaaaaaaaaa aataacaccc
33661 acgcaaaaac aaaacaccaa caactcggac agtttcaaaa ataataataa taaggaaaaa
33721 aaaaaaccct taaaatcaat tgaatgaact gtagaaatcc agttgtggaa aaccggcagg
33781 tatgtgcgag aggataggcc actatcccag agtgtcacct acagtgtaga agaaaaccct
33841 gatcaaacag tatctcccag tgaccctgtg agcatctagg aaccagaga agggcagcat
33901 tccagcagga ggcgaagggc tcctgagctt aaccgaactg ccagggcctg taagagcagc
33961 gggggaaaag attagccacc gcggtcccca gctgaagtcc ccagggcctg taagagcagc
34021 tgctggagtt gaggattgca ctgtccacct gtgagcagca gacggatggg tggacagagg
34081 cagagcacgg ggaaggctag gcgccaacca ctggccttcc agcctcaaga tttggteagt
34141 ccttgtttag ccctgggggt tgccgggggg gggggggaag ggagggaaga agagggaagg
34201 acagcagcct gcagggggca caggcttcgt cttgccccct tttttatact ggccttctgt
34261 cagaagcaga agggggagct ccctgaccgc tgtaccctca agaggaacca atgccaggag
34321 agcaatggtg gcatgcccc ctctcgggtg aggtctcaga ggagcagctg agggggctga
34381 cagggcaccc tgacatgtgc acacattggg actctcaaga caacctacgt gtgggtgect
34441 cctgccccca aaacctggga gtacctgtc tcttagggat agaatttgc agtcattcaa
34501 tctgtagaga aagttctgtt ccaaagtcag ccagctgagg atgggcccgg gagccccct
34561 ccactggcgt gctgtgctca tgggtgactgc tgggttgaaa agtaggggac caggtgagga
34621 gaaagaccag agttgcccta ggaaaagtgg gcttttgagg acagagcagg aagaggctgc
34681 tcatttgagt tagcgttgct ttaaccccag aatccagcct ggccccctc tgccttcacct
34741 ggggtatgtg cctgcggagt ggctgaggtt accaggatca ttggcctact gtcagggtact
34801 gagaagtgtg agatgtatta tatatatata tatatatgtg atatatatat atgcacacac
34861 acacatgaaa aacaagagtg aggtagataa atgtttgaaa aacaagcccc ccaaaaaaaa
34921 ccccccaaaa ctgtcccatc taatacacac atacacagag atacatgtac cctttcctca
34981 gcattttaat ccataacagg ggcttttcta cagtgattaa aacagggtatc acaaaataaa
35041 ttaaaaactcc tacatgaaat accttcttaa taagcttccc ccctcctttt ccttttaagg
35101 gcagaggcta ggaagagcca caagcctgaa cctacagaca agccagacaa ctccagcttt
35161 ccttcctgca tctaattctc agtcacaact gcaaccatca tcatccaaca gttttcctac
35221 tcctaattta aatatttcca ccagaagca tctctcgcgc tgtcactgct ctggtaagaa
35281 gtgctaaatc gaaacaagac aggaccctc cccaacccc actccagggg gaggggctc
35341 caagcccaga gctccgggat tctgggttaag gaggaacagc aaggggctct agggccactg
35401 tagggtcagc tctactccac tttgggattt ccggccccgg agtgggcttt atagcacacc
35461 cactaaagt gctgctcctg gccatgggga gttgggtgtc tacatcttgc tcccaggag
35521 gccaccctt cagacaagct ggttctaaag acagggtggg ctgcttgtag aggaggtggc
35581 agatgggcca ctggaccagc tctgctgcac cctggggact cagcagctat tgtgtgtgtg
35641 tgtgtgtgtg tgaaagatca aatattcatt taaataataa tccaatgact attgtctgca
35701 gttaaaactg ctattgtatt cccaaattgg ggtgtgtgtg tgtgtgtgtg tgtgtgtgtg

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FIGURE 60

```

35761 tgtgtgtgtg tgtgaaccaa agcaaggaga gaaagcaaag tgtgactttc aacaacaggg
35821 actagaaaca ctaaaccagg atgtgtggga tttttaacct tttgtttct gacctgagtt
35881 tgtggcatgc cttgccctgg agcagatgct gtgtgcgggg aagcaaggaa aggagagagt
35941 agggcccagg agtctgtggg ctctggactc ccacctccc cactccctca cctgtgactg
36001 tgctcacaga gcctatgggt tagagggtaa tgaatggggc tgcagggagc aggggaaggg
36061 agatgtattt ataaaaagg catcaaacag ttcacggcaa gttatgtcct agaagcatca
36121 gttgccggag aagaggaaga aaaaccacac tctagtata agcagaggaa gtttcttga
36181 gtgagcagaa aggaagaagg ggtagacctg aaagtttcat agattaaatc cacaagata
36241 aagaacaaaa aaaaaatagc agcttttctt ttctgtaca gatgtataga tgaatatctg
36301 aactgtaaaa aagttataaa actgacatta aagacgatgt gtatgcaaat gtttcacggt
36361 ctaacataga actgagagac ccatgaagaa gtcctagtaa cagaccatgt gaaagctcac
36421 actgcttga tccactgcct gggcgggagg ctcaggctg ctgtggctct gaalcccctc
36481 ctgaacatc cataaccaac agccaggccg agtccccgga accctttcga gtgtgtggcc
36541 ctgaggggag gggcaggagg gaggtcgggg agggggacga ggctgggtgt aggaccacct
36601 tgaccacaaa cctgaccttc aagcttgccc atggccactt cctccagaat tcttggggtg
36661 ctgtgggtgg gggaggggtg gagaaccagt tctgctttcc cttcttcaa ggagggcgag
36721 ttccatcttg tccagttctc ccaaacggta accatgcaac gagaccagg agatgtgggc
36781 tgggagagcc gggcacagtg gggggcctca gcacgtgtct ctcaaatgtt atcatcaacc
36841 agacaccatg gttcatccca cgcctctgga caaagggaaa tcagcgagc gatgatagc
36901 gtgtgagaaa aaccaaaccg aaaacaggat tttggcaaaa atggcagcgt gaaaaatgat
36961 agccacggat gaacaatggc ccttttaaat tttgggtga ccctaaaaaa ggtaaaaaa
37021 aattccatct cagtgtgtga attttttttc tttttcttct cttttctttt ttttaaaaga
37081 cctacggtgt caggcagggt tatgcggggt gatgaggagc cccaggggca gccattaagt
37141 caatctgatt tttttttttt ttttaaaaaa gaaggcttcc cagatgggag ttcacaaaca
37201 tttttccact gtaaagcaga aaagagagaa aggagagcgt ggaagtggaa ggggagaggg
37261 cagagagggg aggcagagga gagaaaaagg cagagaacga agagactcaa ttctcgagtg
37321 tcctgttgct attaatgtgt gtcattaagg tttgcagagg cccatgtcag ttaagggttc
37381 gggtaaagga aataaaaagc tgcttgcata ttgaaaaaag gaaggctcca aatgtgttta
37441 ctgcagagaa gccgtctccc gtgggcagca atggcagggtc tgaagatcca ctgaggtaca
37501 ggaggcttgt gaatagattg ttacaacctg ctctcccctc cccgcccccc cgccaccga
37561 gtgggcgcac acacgttact gttggcgctg gcttcggtgt gtccgaggat cagcaggctg
37621 aggactgggg cagaggcaag gccctctcgt tggcgctcc cccgttcag tgagcgtaag
37681 gctgtctctc atcaaaactg gcgcggagaa cgagcacgcc agggcccggg ccattctcag
37741 ccttgtgtcc tgagtgtctt tcaggcagag gcaggaggcc tgaggaggcc gaagggtcca
37801 gtgggacgct ctccatgttc tcaggctcca tctccagctc ctctggctcg ggaggcttgt
37861 tctcctcgct gtagtagaag gagacctcct ggaagctggg ctccatctca tccttgatgc
37921 tgccgatgat ctccaggaag gagggccgca tcttggggtt atactgccag cacatgcga
37981 taagttcaaa cetaagggag tgatggggaa gaaaggaatg agctgccaga gagaccaga
38041 agaactgtac cacctctgca ctctctgctt cccatctgga tgccctctgg atcctgccat
38101 gtatcttgcc cagaaccag gccagccac agtgccaagc ccagactcac ttcaagtctt

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FIGURE 6P

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38161 ggttcaccga ttccaccatg gacgggttgta ttaatgatag cactgctaag agataaaacc
38221 cacttcctgt ctaagcacct cttctggcca cacattaacc agaagaggaa acctctctct
38281 ctcactaatg agaatacacag ctttcctgac aggcaccatt ctctgtatct cacaccaggg
38341 ctattttctaa gttttcttct ggcaccaggg cgccccctggc agtgggcctg agggaggagg
38401 cggcaggggt gctagacaga cggagcacat atcccaagct tgctatctca cgccagcacc
38461 tgctcactga ggatgtccca tgaagggaaga tccctgtctt gaagatgtag gatgcccagg
38521 agcagagtgc taatagaaac ttcaagtcgg atgccaacga accaaggga gtcctaagca
38581 tcattttctt ctacaaacaa ggccaaggta aaaacagtat aaagcccatg acgtacctcc
38641 atcactccca caaggtcaca aacctttgca aagcttcctc gtcctcgaga gttacatggg
38701 ccagctggca cacaggacag aagagaaagg ctgctcatgc agccaccgtc ctgaccagca
38761 aaggcctggg agtagacagt ggaggagacc ctaagcaagt gaagggtgtg attgctgaca
38821 cgtgcaaggc catgtcaagg accccaatgc cccagtccca tgggagtggc aaagtctacc
38881 ccagtgatgc ttgcttagag agatggtaaa gccttccctt gaggtccgag ttgcaagtgc
38941 tgacagtgtg tgcagaatat gtccactgtc acgtccttcc cctggaagtt tacagcctca
39001 agacggcttc cctgcagaga tggctaaacc tgccctcatg ttcagctgta tataataatc
39061 ctgcttcctt gtttatctgc atgcagtaat ctgcctctct gttcaaatat atacgctaaa
39121 catactgagc ttccagagcc cagtccacgc agtccccgtt tctctatacc caagtgcaca
39181 ctctttgttc attcccttga tgccctcgtc aagtcatagt tctgcaacct aggccatgca
39241 gtgaaccaca cctgggctct gacggatgga cagacacaca ggcccagacg ctctcaatca caggcgtgtg
39301 cagggtggtc atgattctga gggaaagggg tacctagcag caggaaactg tgttttataa aaactcctgg
39361 agaccaaagc actctccacc tatgtcctc caggaaactg tgttttataa aaactcctgg
39421 ctcaacagac gctttacact aaaaccaca aatggaagtt cgaacatata ggaatctcaa
39481 agcaccctga acaggcttct aacattctac caggctgatc actgggccac caggacactt
39541 ctttacaaag caaataatcc cacaggggta aaggcgtgtg aaagcaacct attggtaggg
39601 atgaagttgc ctgtgcagag aaagccactc ttgcccattc ggccagcttc cttggactct
39661 gtaggatcaa gtcaggccag gtggaaggta gttatcttaa aactgaaaaa aggtgcattg
39721 gagatccacc tccaagaatt aagcactctg gaggccaggg gtgaagccaa ccaattacag
39781 cggagccagg tgcagcttgg agcctgttgt tagcgggaatt gtaccagagc agagctgggt
39841 acacagcacc tgtggctgtt tctaagctcc tttgtaggct gagtagttga gacagcggct
39901 gtttagctag gaaccttaca atatttactg cctactcctc tggaggtaaa gaaaaatccc
39961 aattaagtgg ccaatgtctc gacggaggaa aacaaaactg accaaagacc aggctaacta
40021 ggtattctca ctggctctaa gtgactggtc ctagtggcac atgacagggt gcaggtaggt
40081 actaaaagct ctaggcccgg gagtcacgtc agtccccgag agccagagat gtctctttac
40141 tccaatgatt acaacacatc ctcatgtgat gcataaggga aaagcaccaa ccacagcatt
40201 tgatcatttg tctgaagtca cacagggagt gagctggaac ggcgtgaggg tgtcagacaa
40261 tgcagcttta ctgtaagtaa ccatgggtctt gctagcagac ggcgtctctc cgactgtcta
40321 cagacagtca gatctcctga gccggcttgc tctggtttag tgctgcagaa gcttgttctc
40381 cccggctccc atcatttccc gaaggattaa tcggaatggg aagcagacac aaggagctta
40441 gctccgtggc caggctgcaa tttcctctct ggctgacagg cctagccctg aatagaaaag

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FIGURE 6Q

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40501 tgcaaccggg ggcaagaaca tgagatgtgt ctggcccca gccccgtggc caggggtggg
40561 ggggtggggct gaggaggtgc cacgggcagg gtagggatga ggtgacatca gtaaaaaaca
40621 gccatgtgat gcctctttta aatcatccca ggtcagccc ttccagggtt gcccataaaa
40681 ggaagtcttt tttgctctgt gcgatttaag accttgtttt ttttttggtt tgtttttttt
40741 aaatactctt tccacaagaa aactctccag tagactctgg gattaataag ctgataaaat
40801 gctccctcta aaaagcacac tttaaaacca ctggacagct ctgatgagct ggagccgcga
40861 tttacagaat atgtccctct gtgaaggtgc acacctatcc ctctagaagt gagtgtatc
40921 ctgggggtgta cgcccaccgc tatgccatt cctcacttgg cttctgagcc cccaagcaca
40981 ccccggtgtct tcagctggac aggctgccat ctatgtgagg cactggcaaa ctgaaatatg
41041 cccaggacct catgtataca gtaccctctg tggcgctgt tagtactgta ccaggtagta
41101 gtgactctta gcagggatca gactttcaga agggcctacg ggactgagt ggctctctc
41161 tagcatctca agcaactaag gttgttttag ggccaggacc tagacgggga tgetatatag
41221 cccagttgct ggcacacagt cgatgccagg gaccgtccag cagacactgt cacctgcctg
41281 tgatgactct attcaattta tctcgacaaa accagactgg gattcccagc ctcctggggg
41341 tggagaggaa aagtacagaa gtatgcagat tggactgagt atgtctcagc tgcactctgag
41401 ctgggtgacgc tcggctagta aaacgttcaa gttccttctt gaatcccga tcccgaagac
41461 ttggcatgtg agctctggag atgttaatgg atcaaagtga tcaattctgt ggtgagctt
41521 acatcgctgt cccattctgc agcacgaggg ctggaacctg ttccaggatc tccaggttcc
41581 gtgaactctg ggactggccc ctgacctcag cagggttcac tgacaaatct gtgtccaaag
41641 ccctgaaacc caggggtaaa gatgggaatg ataggctccc ctgaccagc ctcacagaat
41701 ttgctagatc aattcaaact gagctattgc actgacagtc agacctggat accctggtgt
41761 ttggtggcag cctttcctct aaagctagaa cactttgtaa tacacaaggc tggatactta
41821 gctactcctg aagcagactg gttcatgtgt agggacgacg agaccaaagc atggccagag
41881 aaagggctgt tcctgcctca gaaccacacc atggaagtcc ttctctacg tgtgagacct
41941 aacaggcttc agactactcc caagagtgtt tgcttactgt gccaaaaaaa aaaaaaaaaa
42001 atcctttcac agaacacatc ttcctctcat cagcgtctca gccaaatcag ggcaccacac
42061 tccctactgg agcagcccgg ctcccttccc ttcactctgt tcttttctta gaaaggagac
42121 cgatctgcc aaggggttct gaatggcaaa gcaaaaaggc ctcctgaatc aatcatttct
42181 catccaagag cggcctccgt gtgtaagctt cctcctctct atgctgggaa caggaagtcc
42241 actgcctttc ccatagcagg tggctccttc ccaagcatat taaattcata ccaaaaaaaa
42301 aaaaaaaaaat ccaggcagct ggggatggat caacttcagg agttccatga gtttctcaga
42361 caaatgtttg ctccagcata aaagaaaaga aaaaaaccaa caatacctct cctgtgacca
42421 ggcccaaacc acaggaacaa aactcacacc tgctcttttg aacggtttct cagctcgtga
42481 gacagtgtct atcctggtat cctaaccaag gctgggtggg cacaccctta cacagactca
42541 gaggcagcca tgctcctact ccatectttc accttgccc acatactgac tattctcgca
42601 atggacgagt aggactgcc tgcaccactg aggtcaaagt aaagctataa cagcactcag
42661 aaccagagc ttctctagga agggccctct catcctgtac gccttcggag gtcagtttag
42721 aaaggccaca gtggcagtgt tctccgtgaa gatgctgcag ggcacagcag gccacggacc
42781 agtcagtggc tcaatatggc ctgctgtcta ttcagttttg taaggccctc ccaagcaaga

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FIGURE 6R

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42841 ggggtttttt tttttacact tgccaacagc tggggcaaaa acaaacaat taacaagtcc
42901 cccacgcccc acccccaaat aggagtattt tataagaaga aaacgagagg aattcaaatt
42961 ccaatataaa gtttttagttg ggcaccagca gtaacactgg ctgcaatcca agcactaggg
43021 gagtttgagg caggaagatt atcctaaata cctgggctac actgactcca tccttgttga
43081 ttcctgaatc atagtggcag agcagagggg ctggaaggaa gagtgagcgt gcggtcccca
43141 gcaccaccaa tcctctccag tgtattagag aaatcctctc agtctatgga gtggtccaca
43201 gagaagccac ggccctctccc actacacaga accatcactg ttcctaccgc cctgtagtaa
43261 atccgatctc cttacaatca cccacgtac cggagtatct tcctctgcgg gaagccctgc
43321 ctctgaccag cagctatctt ctggagacct tgagctagct agtgtcacct catcgagctc
43381 ctcttaggtt tcattagaaa gcctgtgaga tgacattttc aactgttgga gcctcacggg
43441 ggacgatgct agccacaccc ttgacatctc aagattcaga gtacagtcac tagcacctct
43501 ctgtgctctg cccaccacct gcactgcacg cccaacctct ccatctgtac attgcctcac
43561 catccaaggc gccacgagag tgagcgctgc gctggggaag agaaggccag gggtaggcag
43621 agtcttttgt gtagaagtga agaaatcttg acaaccccc tgggattctt tcactagtgg
43681 agctgaacct gttttgaagt gtttctggga aactgtatgg gtctgacat atcagtggga
43741 acctgctttg atgcttaacc ccgagatgca gagcaacagc cgagccccac cttaacgtgt
43801 gcacatcaaa tgcaagtcca ctgctctcaa cctgtactcg atgagccaat cggaataacct
43861 tcattgtctc cttgaaacct cactccaaga agtgccattc tcggggctgg agagatggct
43921 cagcgggtaa gagcactgac tgctctctg aaggtcctga gttcaaatcc cggcaaccac
43981 atggtggctc acaaccatcc ttaatgagat ctgacgccct cttctggtgc tgtctgaaga
44041 cagctacagt gtacttagat ttaataatga ataaatcttt aggccagagt gagtggggcc
44101 gaccggagtg ggcaaccttt gttcccagca accacattaa ggctcacaac catcagtaca
44161 gctacagtgt actcatatac ataaaataaa taaatctttt aaaaaaaaaa aaaagaagtg
44221 tcattctcca gaccactga gccaccaaca tcagatgaca aagaaagacc tctactcaag
44281 agagtacaaa taaaaggccc acatgtggaa agattcttcc ccaattttgg caacaccagg
44341 taacttctga ggggtggagc ctaggaggct gccaggctcat tagaaagtta tcttcaagat
44401 ttaggactac agcaggaaga ttgtgaacct ctttaatgca ggggttctca accttccctaa
44461 tgctgtgtcc ccttgacaca gttcctcatg tcgttgtgac ccccaactat aacactactt
44521 tataattgta atctgctact gttatgaggg aaaatggaaa catctgtgct ttctaacggt
44581 ctcaggtaac tcctgtgaag gggcaagggg tcacgactca caggtagaga acggcttctc
44641 taatggctcc ctttcacttt caagccacaa agtgagactg tgcgctctga cacacctttt
44701 ctaccgtaac agttacctcg ccacaaatcc aatggacccc actgcccctc ccacactggg
44761 agccaatgtg aaatgcttct ccttgtaagc tgtttatctc agggagtttc tcgagtcaca
44821 ctggctgagc acggaggtgg acgtgacacc acgtgtgtac tgccatcgag tgacaattct
44881 cacaaccaat cgatgcagga tgttattttt aacagaagtg gagcgaggca accatctcac
44941 caaccccccc tagggtgtgc ctacaagcat gtccaaagag ggatgagctc aaccgtgctg
45001 taggtccatg cagctcgaag ggattaagaa gacagcagat ggtctgtgac cttgtgctgg
45061 ggctctctga gctttagtct acccgtgcaa gagagtgact cctgaccaca gagctctgtg
45121 tgagcatgct gtatagacct tccaggggct tggggagagc tttcaaatct ggctcagcag
45181 tagtaactaa cttgcatttt tgtcttaaaa attaaatttt gcatgaaaaa gatgagccag

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FIGURE 6S

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45241 gattgctcat gtatttcaga gatgggagat gggggggggg gggtagtggg ggctgagacg
45301 caccgccatgg tgcaaagtgc caattagcac tgggggggacc aagggggcac aggatgagat
45361 taaggagcag cacaaagtca cagatccaac aagctcagca gcagcaggat agagcctttc
45421 taatcctctc ctgtaccac acacaacgga gtgggtggct ctggaaatac atacagcata
45481 tcagggcagt tgtccggctt gtccagaagg ccaccctcca tgacgaaacg aagaacttgc
45541 tcgttggaca agccctggta gggctgctca gccagcgtgg cgatctccca gaggacgacc
45601 ccgaaggacc tacaggtgga acagaacagg aacagctcag aaagggatgg gaagggccat
45661 gtccctcctt tgccagcatt tcttagactc tgggtcctga aaaaaagtgt cctcaatgtg
45721 acgactgcac tttgtggaca tcaaaccagc cagcttgcta cgtgtgggac atctgttccc
45781 ctttgtcact gctaaggctt cctatagggc tactgcaacc cagggtgag gtaattaatg
45841 ttaggggctt ctaacatctc tcacagtttt aagagcccga tctacagcgg acacattcag
45901 tgtctggctc cagccattac ttggacataa gccaaattag ctctagtcca gcaaggaatg
45961 cagaggacca ggtcccagcc tggccactga cctgagacag ctaagcatct caactatctc
46021 ctgcagggat ttctttcatg ccagcttaga aatactgatg ctaatgggtc tccacgcctc
46081 cgcaagaaga atctgatcag ggttcttaaa acaatgggta tcttgggctc tccaaagcaa
46141 ttctgacctg ctggtttagg ggtagggagc tgggcctgga atgtctcaaa gttctgtagg
46201 atcttgactt ggggtcaagga agatgaaaac tegtccctg cagaactcag gagccatggc
46261 tgcagagggtg gctgtgtcag gaaggggaact ggggtaggat acactggcca gggggtgtgt
46321 cgcaataaca aagagtcctt tgggtctagag cctggctgag gtatgaactc atcaggcgaa
46381 gcagcgagga ttctactgcg tgaggtaggg cctgtcagcc cagaagatgg aactaaagga
46441 gatccatgca tgcagacact tcagacagac aatggtcaca ctgtcgctca gtgtgaacac
46501 accttctcag ggagaaccct tgctttcaca aaattcttcc tggcctgtct gctcttatgg
46561 tcaggctgta tggctagaat gaagaaggct gcccatggca agccaacaca aggcttcgga
46621 tggaaacctt gcagggctga gccccacaga agagcctgag gcggccattt tccacttagc
46681 actctgagga tcctggccta agctggagca acagcctctg actgcatctt aacttttggg
46741 tcgcagcttc agtttccttc taggaacaaa agggttttgt cccaactgat gctaagcaat
46801 gtcagacagg aacagaacct cagcaatcag acccaagttc cttgggaacc ggcagtcact
46861 aagacagaca gtgcagttac ggttttcaaa gacctggccc tagagaagca ggtttcctgt
46921 gtgtttcagg cctgggttct gccttgcaga gcctttgtgg acactcggag gcattcttta
46981 gaggtgcag tgcacacct catgtctgaa tccggcctga gacaagcagt gatgtatgtg
47041 gttttctctt tttatcaacc ggtcttgacc aggttccctt ccaagccgac tccccttgtc
47101 tttcatgctt tccctgggtg accacaggct ttcaggcatt cagtcacaat cctggcccc
47161 agctcttgac tgccatgtct agattgctgg ttacttgact ctacagactc agcatgtcag
47221 ctccagtgtg actcttgctg gcacctgtt ctctcctgg actccctgca ggccaactc
47281 ccattccatc ccaccccatc tcagcagcca gtctgctcat aggacggaca ggaagataga
47341 gagtataaat cagaaagaac gaagacgtgt aagggctggc cttcctgccc ttgtgagga
47401 ggggacagtc cctgggacat ctcccagaa gctcaaataa cagctgtgat aaatgcagat
47461 ggtcaggggtg tggcttgacc tgaggacacc tcccctcacc atgttctaa ggtctcctac
47521 caagtcaaac aaaatcctt caacttttct ttggattttt acctacttct gactgtgaat
47581 tcattctaaa atgactgcaa ttcctctagc aagcagaggt tcaggcagag ctgagcatcc

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FIGURE 6T

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47641 gtttatacgt tctagtgtcc ttgatgtccc cagctgtgtg ctcaaacacc ccagcacttg
47701 gcctttttctc ttcacgcatt ttcttattgg tttgtaatgg ctacgtaatc caagtggagg
47761 aaacctgcag gaagcaccct gtgcgccctc ggctgtggca tgcagttggt acccagagtc
47821 ggggggagaat gagtctgtgc tcaactcttc cctatcctgt aagggtgatct ccaagcttcc
47881 agaaaaatga agcttagaac aaacagatgg aagtgtggcc ctagggtgtgc cctctcctgc
47941 gacctcatct acacatggaa cagagtctct tgattcgaca gagaagatgt aacctcggag
48001 aggctaattg cagagcagac ctcacccctag agtcgggaaa caaccaggcc gcgctgggtc
48061 atattcaaag gctattttcca atttgcacct gtcttccaaa caagatccaa ggctcttgac
48121 cgggaaaggt tcacgaggct aaagaactga tgtcagtcac tactgagata gtttctctgt
48181 gtggtcatcc gccctttgaa taaaccaacc accgcttctt ctgtgacaca acagcaacgg
48241 gatctcccga ggagacagcc aagacacttg ctgacattcg aggaggggga cgacgtgccca
48301 gggctcctgc ctgccaagaa ctccagttgt attttgaac ccgatgacct ccacacggtg
48361 tttccaagga actgcagtaa acattactac agagaagtct ttgcaccctc tggtcagttg
48421 gctactaccg caagacactt attattaagg aagatgcttt gggtcaggaa taatggacat
48481 cgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgaacaga
48541 tgagaccaac agaaaaccac aaccaccaag actcaagttt tgggtttaaa taaagcactg
48601 ccttcaatct gaaggtttcg tgagctgcgg caggagcaca tacataccca gtaccaactc
48661 actgagagtg gggaaagagag acgggggaac aggcagagggc gaaggcattt cccagctctt
48721 tggaaatata atcaatattt gctaaaaatg gaaggaaatg ttggttctac tctactcttg
48781 gcttcccaca gatacctttt ttgctttaat ggactccaca caggaatata taaaagacaa
48841 agggctaacc ggcactgaga gctgaactca aggcaggcag ttggtcacag tgaacaaaac
48901 aaggaggaga atgagccacg agtgagaagg tccaagctgg ccatggaggg aaactctcat
48961 accagacatc agaatgagta gtgaagacac catccttgag ggactcggga gacatccagc
49021 gcacaggcag caaccccttc ccgcttttcc ggtagtagtc cgtctcgtag atgtctcgtg
49081 tcataccgaa atctggaggg aagatgcaca gttactcggc tggaccaggt cttggggcag
49141 agccctgtcc ttccccccat attcaagggt agacatgttc ttgctccact ctgagagggc
49201 tctagcatca cagccacttc acaggagaaat acaagacatc tctggtcttc atcaggctcc
49261 tttaagaaat taactccctt ataacattta aagcgagagg cagtttgcaa aatcattgag
49321 taccatgatt tttcaagaaa atatacgccg cacagggtga ggatataggt ttaaagtttg
49381 gtccaatata cgggaggatg aagaccccat ttacttggtg gtgtgtctct actgctgagg
49441 aaaaggcctt ttgccactcc acagaggaca atgtacgaag taagaactca ggaagataaa
49501 aggacagcaa acagctgaga tgttcttcac caggctcctg gagctactac ccaacaccct
49561 ttcccaacac aatactctca ctcaagtttg aaaatgtttt ccattttctg agtttcatca
49621 tgggtgaatgg caggcttgct tttttataat ctcacattac tgtgtcttta tccatttttg
49681 attttccact caaccgcacc acctttccct cacataaact cttgcattct ccttccctgg
49741 aggggaagagc tgctcaacct ttaaaatgtc ccctcgcacc tctaagtggg gccacaaaga
49801 ggtgaggtag aaaaaaggca gagcaaacc atgtagggtt tgctctgcat ggatgttaac
49861 ccaacacaat tgacttgca cgtgtctga gctactggct gcctctcttg aactgattta
49921 ggggtgtgtaa tccctgagat gggggcactg ggggacactg aggaatgcag aactcgcccc
49981 agggaggaaaa aggaagtgtc taaatctcat ctctgaatta atccagagac atgcaaatga

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FIGURE 6U



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50041 gaggatctgc tttgacttgc ataaaagggg aattctagaa aacaatctct ctccctaaat
50101 gcaaaaagaaa aatagaacaa cccctcttc ccaaacgggc acacacaatt taattctaaa
50161 aagaaaaaatc ataattataa tagaaaatat cctcataaat gcgccacatg gttaagcaga
50221 aaatataatc cttactgatt tggattttaa atggcaaaaa gcacacgcac acacaaaagc
50281 atttttccaa ctgtaatgca aaatgggacc aaagcagcct ctcggaattc ctggctgtgc
50341 tgagaagggg gcacagcagg gtaagatgag gacaggggca caggcttgct gtcccagccc
50401 gcctcctcct ccagctctgt cccaatccac tctcactcca cagggtggga aagatggcac
50461 agggaggggaa ggcacctgcc tcaggccact caggagcaca gtttcctctg aggactaaaa
50521 tctagatccc cacacataag ggaggatgg gaggcaggaa ggaccacaaa ggctgggttaa
50581 gaggatgcgc ctcttatcta gaaactctgg ggcggggtat cctcttaagg gctgccacc
50641 aagctaggct ccagggctc caaatatgag tgtacaaacc cagagacagg ctgggggtat
50701 cttcagtaac tccaatgact gacatctgtt ctgtancaca gctgcatgcc aacaccctta
50761 actcctgcaa tcagcaaaga agagagcccg actttggata cctctctaga gatgacaccc
50821 atcgcttact aagaggccgg aatggctcat gcaaaaacca cttctagggt tgaggcaagc
50881 agaactctc caggacacaa gctcaagagg cggccaaagg ttagtggtctg atcgcttctg
50941 ctacatctgc tgtccctctg cttgttctca ggatggacac ttgttatgtt tctgacctgc
51001 tggcctatcg cagtaggaag gtaaagtata tgcaggatgg tttctgagc tttctgttta
51061 ctactttttt tttttttttt ttttgaagta aaacacaaa aaacaaagcc aatatacaag
51121 ctgtaaggct ggggagaatt tctagccaat gaccagagat gtaatgcaat cagtgtttta
51181 ggatcacaa gtgttggcag caacaaggta ggctgagcag ctaaggctcat ggcaggaagc
51241 tatgcacgac agaacggcca agtgcttggg gctaccactg aaggatgcac ctgagtggt
51301 taaccagcag catacatcag gccctcggtt caattcctgg cagcaggaga ggaggagaga
51361 acttagagcc gaccagtcct atgagtgaag agcagtcagc agtgatctcc cgcgactga
51421 catgaccacc atataccctt cctgttacac tatgcagggt ttcaccatag gggcacctgg
51481 cctcttagga accccatggg cctattcagg gacaatgctc tttgtaagct gagaaacttg
51541 aggggtggac tggatgggtg cattctctc aagccaaaac cacttcagga agcaagctgc
51601 cccgattatt tctgtaacgt ttgacctggg gagcagggcg ccaatctgga ctaccatgtt
51661 aagggtgctc ccgggttaca gccaggaata gacagtcaca cctctccag tggcagacta
51721 actcaagggc gaggcactgc tctctcgga cataatgaaa atctctccag tggcagacta
51781 atgactgcaa agtcccctca gcacctgtga gttcagttta gcctgtgctc caatctggaa
51841 agcaaggac acacctccaa ttttgactgt gaaatcttcg gctaccatgc agttcctagc
51901 agcaaggctc ctgtggacga acttggtggc attgaggtag gccatgccat ctgcaatctc
51961 tccagccatc tggatcatct tgcttaagct cggaggaatg aggactagat tattctgctg
52021 cagattcaaa acaagacaaa gccatgagca acggagacct ttccccctta acctcctgta
52081 ggtctacact aggagtctga aatgcatatt tacttagtct gagtaccaca ggtcacctgc
52141 agggagtcag gacttgctaa gaaggactag cacttctagg gaccagcaat ctcttttccc
52201 accccctccc atgcatgcat gtgcatggat gtgggggcct gaagcttatg ttgggagcta
52261 ccttctaccc actggttgag gcaggggtgc cctatcaaac ccaacctggt caacatagat
52321 tgctctggg atcccaactc atccttccaa ggctggaatc acaggtgtgc tgccacacca
52381 gccagcctt tacctggctt ctgacgacct gaactctggt ccttatgcct gtgaccaccc

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FIGURE 6V

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52441 cctccccct agtcttttct atttgagca ggacaaaaat gatttgaagt gaatcagcaa
52501 gtttaggcat taagcattct cagctccagc tagtttccat gttcctttgg ctcccgccat
52561 caccaagtgt gagtaagagg aaggacagag aacccgtaca aaggccacgt gaaacagaca
52621 cacttcctaa gtggattacc acgagctttg cttcccgtgc aagctgccag gacttattcg
52681 tcttcattcc cttcttctaa ggtacaaaga taggaagact aatgctttcc tcttggatta
52741 ctgttttcta cgggcactga ggataaccac agttcaggtg gaggttcacct tggaggggac
52801 caaggacact gagcagcaat gaggaccaat atcatgtctg aagaggaggg caagatgctg
52861 ccttaggaac tgaaaagaat taacctaaaga agtggtaaaa tcataaacia acaaacaaac
52921 aaacaaaata agataagatt tatgtctaag aggctgatga gaatggctta gtgggaaagg
52981 tacctgctgt caagacaggg ggcctatggt catgtcccaa gacaggtatg gtaaaagatg
53041 aaaaccaact ccctcaaggt ctaagtaggt atgcacatgc atatgcatga acacacacac
53101 acacacacac acacacacac actacacaca tacaacata -aaaaattccc aaagctccgt
53161 caccacctc ccatgtgcaa aaccaaccat gacccttatg cctcagtttc cctaactgaa
53221 aaccttctca tacaacacta tgaagccatc tcatttccca atgtatctca agtcacagga
53281 gagcatgacc aggcttggag atcacactat ttgggctagt atataggccc tttgtgctct
53341 gaccacgatg aacactcaag agcattctgg ctcttgcca gggttgctaa gttctcagca
53401 gatgccagac tctaggaggc cagcaacagc cctctagcac gtccaggagt actctccaga
53461 cgacatggca tgtgaggacc aagttgagct catatatcta tttaaccatt ttcactctga
53521 tccagggctct ctctctataa tctaggggat gtcctcagag gatgtgccat cacaggtgct
53581 tccttgtcac gctgaccttt agcaccgtta gggctctaca tacacatggc aaagcaggac
53641 ctctgcagtt ccgtgacatg tacttatagg ctcatgacac atactgcagt gtatgtgtgt
53701 aatgttgtgt aactgttcaa caaagagctg tcacttaaca tgtgaaaaac aaccaacaat
53761 ggggacttaa ttatgtgcag gaaagggctg ggctgacatt ttgtcagttc atggtaatat
53821 gttgtcattc ttttcttcat ctcgagaaag aagaaatctt tagttttgtt agagcctctt
53881 aagggtgagca cacatccata cacttatcta agtaaataag caaacagcaa tggggggagg
53941 tagaatacgc tgaagccggg gtgtatacac tgaagctggg tatatatact ggagctaggg
54001 tatatacact gaactgtgga gtatacattg atgctaagat atatgtaagt tattttttaa
54061 aaaattctga catgagttag acaaaattta gatctgatga atttaaagat taagttttac
54121 ttccgaaaga gactttcgta atccaacctg tctctttaca ttgaattaaa attttgtttt
54181 atgtttgtgg gtgttttgcc tgcattgtgt tttgtgact acctgccac ggaggcccat
54241 ggaggccagc agaacagtga ataccgacag ttatgagccg ccacgtgggt gctgggaatc
54301 caccaggggt tctttggaag agcagccagt gctcttaact gctgagccat ctctatagcc
54361 ctttctctct ctacatgagg aagcggaggc ccagaggcat ctgttaactg aggactggag
54421 gtaaccaatg gcaaaaacag ccccgagagc acaagttacg ggtttactct gggcatgtgt
54481 caaaggcatt aagcacattc tgatgttagg aggtgcctta aaggaccact ctccagtctc
54541 cttctgtaga ctgggtatta ctgggtagg atgctgctgc tgggagaaac aggcatagct
54601 ttgtggctct gctatcaatg cataaccgc cttgtggctc tctcctgaaa cttcagaaac
54661 acacatgagg acatttgtga acaggtactc agaactaaaa tgaaggaacc atccatcact
54721 tggtagatga ttacgttgtg gaggaaaaga aaacgaaagc ttctacagag aaggggagca
54781 aaccagaaaa gggcccagaga agaggaagtt ccccttacag cgaatgcaga gacaagctgc

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FIGURE 6W

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54841 ttagttagcc acaggtatca aagccagggc cgaagtgaga gcctcagagc ctgaggcagc
54901 cccatgaaag gcatttggtc cagcaatatt tctcaacacc cccatcagtt aactcttagt
54961 gaggacttag aagccaaact taagccaggt gcttgtggtg cataccttta atgccagcac
55021 ttgggagaca gaggcaagcg aatctctgag agttcgaggc cagcctggtc tacgaagcga
55081 gttccaggac agccggggct gcacagaaaa aaaaacaaaa caaatgctg tctcaaaaaa
55141 caacaaacaa acaaacacaa aaataacaac aacaaaaaag aagtcagact cacatatgct
55201 aaaaagctgg ctgtgggcta acacaacaga aggggacact ccacagtgc taatcaaaaa
55261 attacacagg acctactcag gttcacagtt tgaaaatctc actagcctta agcagaatca
55321 tgcagctgga atggttatca tttaaaagcg caggcacaat actggcctta tgcctagcct
55381 ggggagtagg ttcagggttt gagaagtgtc tgaagcagtg tcggggcaag gggagagcag
55441 tgtgtgccat caaggtaagg atagcatgct cacatgtaca cgtgtgtgtg tgtgtgtgtg
55501 tgtgtgtgtg tgtgtgagtg tgttltgtgag tgtgtatgag agtgtgagag tgtgtgtgag
55561 tgtgtgtgtg tgtgtgtgtg tgtaaatggc tcctgaggaa acagtggctc cgtgcacaga
55621 ccgggctgcg agtcactctg gccaaaacct ctgacaacct gaagagtgc ctttattgag
55681 tacttactga aaaggttacc agccacggtc atgacctga ggtaaagaag aggctcacc
55741 cgaggacctc gagagtaaac gtatgctagg cagtcaagtg tactggaaag tcagtggggg
55801 agggcagccc ggcctgagtg ggaagctgtg ggaaggggtg gccatgacac gtggtagagc
55861 agctgggggt ggigtatgat gtaggcaggg gttagcggga tgcagaaaca agagcacaga
55921 gatgctggag gttgaatggg tgggatgcag agacagacct tccaaagatc ccagtctgcc
55981 tacacttgga caatcctata tagagggaac tgacaagaaa gcatactc caaggactcaa
56041 ggctgagaag caaatggact taaagacacg tttcctacaa gccagctcct gaaaaaagtg
56101 gaccaagcaa gataacacag cgaggaaaca aactgacctc cacttctggc ctcagagacc
56161 ggagataaact tttgagatca ccgctgttca ttagttccat gatgaccagg gtgggctggc
56221 cttgggatac cacacccagc aaccggacct ggaggaatca agaaaaggac tcagaggggg
56281 aggggggcat cccacatgat gacctacgcc tctcggaact ggggtggtgt ggggcctgta
56341 gccaggagca gagttctggt gggagggcga gggcgaggct cccacctcaa ggggtctgtg
56401 gtggcaagaa tgcaacgggg aaactaccca ctgggaagag ggcaaggcaa caattcgtag
56461 ctggccaagg acatacaggg tggctccttc tgtccatact ttctgtccat gtctcatctt
56521 ggcttcttac cacatggtga caattgaact ccttcatcac cgaggcctcg ttgagaaact
56581 cgattctttc acgcatactt gcagcctcgt ttaccgtctt gatggccact ctggttctgg
56641 gttcatcctt gaccacaccc ttggccactc cttcatagac catcccaaag gaccttgtc
56701 cgagctcccg gttcatggtg atcttctctc gagctacctc ccattcatca ggcacgtaca
56761 ctagtaacag acaggatgga aacggccctt agacagagat tacaagatgc tgttcctaa
56821 gaccaccaa ggagaacatc aaggtacaaa cagtccagca cgggtactca atctctgagg
56881 actccatgac actttgaggg tgggtactcgt agctaagaac cagaaggaaa ccaagaaacc
56941 taagatagga aaaccaaata aaaccaaaca acagtgggtc ctttttcata tccttgga
57001 aaccccaacc caacaaaata aaaaaagcaa attagcccta agagacaaag aaagtgggac
57061 ttctgttttg cctgtcttca tcaagggatg gaaatgtagg tcagaagggg agaacagtgg
57121 gaggggaaag gaccaaaggg ggtcaaactc cctctcctt ggatgaagcc agaggtgaga
57181 aacatcctct gcatggcctg ggtgccagtt tacaggccac ccagcccccac tgtaggcctt

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FIGURE 6X

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57241 cagcgcttga agtcgtgctg gaagtaagac atatactgca ttttaaagac ttgcttaaaa
57301 caagtaaaaa aagataactt ttaaaagatt ttaaaattta cgtatacatg tgaaaatctc
57361 tctctctctc tctctctctc tctctctctc tctctctgtg tgtgtgtgtg tgtgtgtgta
57421 tgagcacaca cacatgcaca gatgtgagge accaccctg tttgggtgcc tgggaaaccc
57481 agaagacagt gttggcttct cggacctata gttacagatg gcgggaggtc tcttcacaga
57541 ggtgctggga actgaattag agttctccag aaggtcagca aggctctcaa ctgctgggcc
57601 catttttttt tccagctttg tattccaaag acttggttaa agcaagttaa aaaagatagc
57661 ttttatatta actgttgga gttgtgggct aaatgaaaat tctaacagat ttatctcatc
57721 agctttttaca cttaaaaaaa catggctact agctgggtgt ggcaacagga aactgcagtc
57781 ccaccccagc ccactgggca tggaggttgg agatggggtc tgctgaacta aaggcatctt
57841 cagatttgtt ttcaaaacac caagacaatg tgtcagccgc ctgggatgtc tatcagttca
57901 cgcacttcat tccacttctt ccatagccat gtccgacaac aagctcaagg tggctgagag
57961 ggagaaactc agtcaacact aaaggcagag actcaagaga agagtctca gccatcaaaa
58021 gaaaccgcag aaaaggagat gagaggccag cccccaccc caccgccgca gagcgctgag
58081 gtaggtcttg tgcactacaa gcactgtctc cctatattcc tccatacagc tgtttaactc
58141 tggaagctgc agaggttggg tccagtttaa cacaccctgc tgcccccttc accgagatct
58201 agtgacgata cagactgcct gccttttcca cctgagagga aggagaactc acacgttgat
58261 gaagaaaaaa gcagggttgg gagatgaaac ccagggttca aatcccagat gattcaaggt
58321 gctctacagg ctgtaaaatg cagtttaatc ccagggtctg gctgtgttgt ttttcaagtg
58381 atttgactta gtggaatgca tactgtttta aaaccatcaa ttttgtgaat ggctgttttc
58441 cctgcatgca tctgactgt acgcacatag cacctgggtg ccactggcac gtgggttctg
58501 ggaatcaaat cagggtcctt ctgaaaaagc agccagtgtg ttttaactgt gagccatctc
58561 tctagccccg gaatgcatga aagtattaaa acttaacaca agaagccaaa ctcttgccca
58621 acacaggtga agcctaggag ccccttcca ggggatctct agtgaggga gtgagcgctg
58681 ggatggaggg ggactcagta gtgacccac ggctttggcc tgcactctgc aatgccagga
58741 acctccctga cacggacctg aacagaattc cttctccagc ttccattttt ggttatgctt
58801 gatctgggtt gagaaaaata aataaacgaa tagttctcag aaggaagggg gaagagaagg
58861 aaagaaaata agagaggcaa gtaagaaaga ccaaacacag gctccatccc ataacgccag
58921 tgggtacagc gagaactgaa atcatatcaa attaatacgt aagatctgga aagagaatac
58981 ctgctccatg agaaccataa cctaacagag ttactgacag ccctgtctaa cagaggatgg
59041 ccagcaggca tggcaagaag gagccctag cttagagaca ggcctgggag gggaaatcacg
59101 gctgtgtttg tttttatgct ttttagatgcc gagctgcagt tggaggtggg agaccccacc
59161 agcaggctcat cacggttatc agtcaccctc agagcacaag cccttacttc taagtgatgt
59221 cttaagggaa ggggtgtttat tataaattcg gggctgggga ccccatgac ttgtattttg
59281 aagaatggaa catacatctt gtggtggttt gaataggagt ggccccaca gactcacaca
59341 tttgaatgct tggtcattag ggagcagtga tacctgacag agattaggag gtgtggcctt
59401 gttggaggaa gtgtggcacc gaggggtggc tttgaggttt caaataccag gctatgtct
59461 tgctctatct ttgctgcctg atccagatgt agaactctta acccctctcc agcaccatag
59521 caccatgtct gcctacatac catcatgttt gctaccatta caacatgggc ctaaaccctt
59581 gaacctgtaa gctcctttaa gccagccact ttccatgaga agagctgctg tggtaacgg

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FIGURE 6Y

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59641 tgtctcttca cagcagcaga acactaagac acatacttat ctgtctactc acttactctt
59701 acttactggc tgatttgggg acaggactgc tctatcttgt tcataacttg cttgaacttg
59761 ctatgtaatc caagctagcc ctgaattgac aacttttctg cctcagtgtc cccagtagct
59821 ggattccagg tttgtgtggc cacatttggc tcctgtgcat gtttttgtat ttcattggaat
59881 atgtatgtct ggtaatttct caactagaat tctgtcttcc atgggcctca gacaacttgt
59941 gacctgcag aggctgagct tgctgaggag agcagagggg gaaaggctt tataaacact
60001 ctctgtaagg atggggacca ctgtctccat ttattacctc taaggatcca ggctggcttt
60061 taatgagaat caactacacg gcttgcttgc tgcagagcat ggagftaaaa gcccatcaca
60121 tccattccct gggaggtccc tgaagttagt ggtctcaacc ctttttctaa actcaatcca
60181 gctgccgact ttagccagag tacctcagct ttgccagcca gagctgttca taaacttcgt
60241 acaatgttat cagcactttc ctgtagggca ttctcagtgc actcttgaca acagcaacat
60301 gcagattaac tctgggagaa agactgttct aaagcacctt tcagatgcaa tgtcactttg
60361 tagctctttg aggcaaaagg cttgtgtgct tgctgtgctt gtcaaaaggc caaacaaccc
60421 aagtgcagat gaggtgacag tgttctcagc tgttgacctg ggtagtgaca agtttgttct
60481 tgctttgttt tgaagggggg agggagacta tttctctggc acctcttttc tcttttataa
60541 ttattgacct agacacaatg gctgcacggg tctggctagt taggggacgg aggcaagggtg
60601 ttcagatcat ctgaggccag gagtttgagg ctggcctgta taaacaatgc atatttagtt
60661 tcttgatttt tgcccgtttg ctttctgttt tgttttgggt gtgtgaggac agaaccctgt
60721 ctggaacacc gtaggcaaat gctctatcac taaactacat atccaaactc acttcatttg
60781 tttgtttgtt tttaggagaa agatagtctc cgtaagtaac tatgtaacta tgctttcaag
60841 tgtggtgctt acccttctag tgtattttct atgctttata ggcacaaacg tatgcacata
60901 tgcctactta aaaaataact ctgcaagacc ttttgcaaac agaaataaca tcattattct
60961 gcacctgatt caaattcaga agaggctgtt cttgactggc tttactatac acataatcca
61021 gttataaatg attaaagaaa ccatagttaa accatacgca cttacatggg gctttttaat
61081 taaaaagggg tttctctttt tttttttttt cccatgtgag caggataatc aatcggactg
61141 tgtcttatct gggccgcac tacttacact tctggagcaa agaaacattc ctcctgaaca
61201 aactcctgcg ctgcacagac ccccatctaa ccagattccc tacatagccc agcaacctca
61261 cagctagctc ttccatacac cacatcatga ggattcagga ggaaggcttg ggatgtccct
61321 tgtgcagact tcccacggct cagctgtggg agcctgaaca agtccttctc agagattctt
61381 tttttgcctg catctagata gacatgagaa agctccaagg gctaactgag gagaggaccc
61441 ctcccagct tacttagaag gtctgaagcc aagcataagc gctaggggaa aaaaagagac
61501 cagtagctaa aacacagggt ccgagtcaga acttctgagc catttaatta aatgactttc
61561 attagttact gccaaaggga atgtaaatgg gtgcataggc tgtatgaccc taatcaggat
61621 agaacagcag agggattcca agatcataca acgctatata gccctcactg gccagggaac
61681 gcctgcagcc ccacctgag ttgataccca ctcaggatgc ctggctggct acagcagtcc
61741 tctgactaga cggtagtaat tagaatgtc ctttactct gatgccacac ttcaagcggc
61801 taactgaact gcttagcaga ccggccaccg gcactctccag agcctgggtt ctactggggc
61861 atctgagagt cccagaatgt ctgacagtca ctgagtgtta aagatgttat taaaagacaa
61921 gaaggaaatg gtaccaaagg cagatcctgg gacaaaggta tctcaaaatt acgcaacgct
61981 tttctccagt cagcacctga cagctcccat attcccacac cttggccagg acgcttacca

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FIGURE 6X

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62041 tcagctgctg tgaaatactc ggggttcaca gaagcatata gcactccatt gccaacctg
62101 ctgttatttc tgtcaaaaaa aaaaagatga aaaccaggtc aacaaatccc atctctatac
62161 atttctgtaa ataccttttc ttttcctttt tttctttctc acgagttatc ttgagcaagg
62221 gacgcaaacc atgatcactg ctgacgggac ccttgccctg actcctgatc caggccccgg
62281 tatctgagga caaatctttc cacttttgcc ctggcctcag attagagctt ctaaagaaac
62341 atttgtttct ttgcttcact ggaaataaca aggccactc catgggaagc taaactggca
62401 tgcttgagga agctcttaca aggcagcaat ctgtgtgcta gaacagccag aaagcagacg
62461 acgggtacag agaaggaagc aaccctctc ctgttgctgt tagtcattag gaaatgtcct
62521 tttttcccct ctgaagaatg tctgactagg aactctggct gtccagctcg catggtattt
62581 tccccacag acgagctatg ttcaagttca aatcatcaag ccaatgcgcc acaagtactg
62641 tcttccgctg gcccaggcac tcacctctt ctatggaaga catacagcat gataaccagc
62701 cccccaacga tcagcaggat ggcaaccggc agagcaatga tcagatgcat gaagttctca
62761 tacgtcgctg cagagacaag gaagaaacag gaagacgtca cgcacgaggt gaataactgg
62821 ctcaactcat ttctgtgtat ggttggaagg atgataaaac cgcctctgga atagccttta
62881 ctccctcatc tcacaagagg agtcttcgag gagtcttcta gtgctgggac aagaccagca
62941 gacaaactga attgtttgga gaaaggtaaa taaatacaga ctgaagcaca cactccttta
63001 aagcactgca tattctgaat acagcaagta attctgaagg caagcccttc ctgtgtgtag
63061 ttttgygaa gtttagctga aggaaaatga gcagacactc acacacttac tagttgtcta
63121 cgtattctt atcttttaag aaagtccac agacagcttg ctgccactc ctcgcccccc
63181 aaagcactgg atgacactcc ctgccaatgt tgctctgagt gttctacaaa tatgtaaaac
63241 caattcaagt ctgaacttgc taccagtacc tgggtggtaa gtaccacagg atggcctcca
63301 ggggttcagg tctacacctc tgaaaatcct gagaattctg ccagattcaa gaactcagtc
63361 ggtggacagg tggattaaca tggatgtacg ctgggcatag ggggaagaag agatggggga
63421 gcgaggggtg cttcccctag ggaaacggct tcccgtgcag aggaatgtct tgcagagtgt
63481 attgaatgat gaaggggttt ggttcagct aagtggtttc cgccccattc ttcagattga
63541 gaggagtcag tggtcagcag ttaagcctat gaactgcagc agtgaccagg atattgagat
63601 gttcctcagt atgtaacact ggcaccttga tctggggaca accaacagct gtctaagtgc
63661 actgaaggcc tgagcactgg gaggaatc tggccgatt ctgtaaacct agctgactct
63721 ctgtagtgtc gtggacacta gagaagaacc tgctactagc acttttctga agcagtgagc
63781 ttctaccac agataactag ctctcaggcc tcgccagaga agcctctttc tgcagcagat
63841 ggaaaggatt agagaaaacc atgactgggtc aaaatgcagg gaaccactga ccatggggta
63901 cccatgcccc actgatgata gaccacacc acaaccccc caacaaatgc tcatggaaca
63961 ctgcaaaata agtgcgtggt acgattctaa gatccagaag cccagggtgt ctgctgaggg
64021 atgccacctt ttatgtaaga caccaccgc atgctgtaat cccaacaacg cggttaccta
64081 aacttgctga atgacaatac cagttcacat gctttgaagt gtggggaatc tctgaagccc
64141 caccctaga tgagaagtta ccagcagtta atggctgctg agagagaagg aggatcagtc
64201 tttatcaggc ataagcttgc tgataggtta gccaatccca cgtggtcatc cctaaacaca
64261 tacatgtacc agtaacacta aatgacttg gcagagcatg tgtgtatatg tatgtaggtg
64321 tatatgcata tatgtatata gacatatatg tatcaatgtg cgcacaagtt gcttagcaac
64381 aataattaaa gtagtcatgg aactgagaga ggtgggcatg gaagaagctg ggagagggag

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FIGURE 6Z

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64441 gagccagatg gtgtaaatac agtactcatg tcagaagttc taaaaggcta aaactaaaac
64501 aatgaagaag aagcatcagt gaactcttcc aaggccagac tgaaaacgga ttcattgtact
64561 gggaagatga gtgtgtctga ggacacactg ggggcctctg cacactgcca ggtctagagg
64621 agttaaggga acgtaccagt ctctgtggc atgctatgca tcgctccagt cagacctcag
64681 gaagaaatcc ttttcataa gcaagatcag agaggcgctc taactttgcc aggggtgcac
64741 ggataactga caagttccaa agtcagagcc tggctttcct gcagccctgg ctccagaacag
64801 ccgcaaccca gtaactggga ggctggattc ccgtcatgta ccagaaagaa tcagtaagac
64861 tccagttaat atgggaaaac aaacaaacaa aaatgagtat gcggagaaga agaagcgaag
64921 ggctgtgagc tttcatctga gagcccaacg gaatgcagat cagggaatga aacggaccga
64981 agtgcctcca tgaaagcact ttagatttca ggcttataag gagtctatag caactattgg
65041 acaccaagt tgacatgtct acacaataag gatggcggtg tgggtaaaaa cacttgctat
65101 gttaccttgg caaccagaat tcaatccctg gaacctgaga atcaactctt caatgtgtc
65161 ctctgacctc tgcacatgtg cacaccaagt acacaccaac agtatagaga tgtctccttg
65221 gaaaggagct ggggactcag tggagacatg ttcctggacc gcgagccact caccaatggt
65281 tgggtctacct ctaaactcta ttcttaatcc tgaaatacta caaaagccaa aattaagtct
65341 ttttcaaaat cgatgggatt cagcaccttc cagtttctaa aagtactccc acgtgcgcct
65401 ccctgccaga gagaagctcc gagctttcct tttcccctag gagaattcgt ggttttgtgt
65461 tcttgattct acgggtcagg ttgttctgtg ttttttttga gtttcacatt tcaacagggg
65521 cacagaggaa ctggaacaca tccagaagga caaaactgac agaaaattgt ctatgcaact
65581 ggctttcaag aaagggccca aagacctgag aatatttaac cgggagggaa gaagtctgaa
65641 gaggagttaa atagaattca cgcaccaaga tttccttaaa aacagcaggt gatgccagc
65701 tttcaatgtc cccctctgag gattagacc aagaaaactg tgctaaactg cgtctgtctg
65761 gacaccggga aaatttccca gaagccaaga gcgctagcac gcagcttcaa tccccctgtg
65821 ggatgtgcca acttccactg gagaaacccc attagaggac ctcttaagag tccccagtgg
65881 cattgcagtc ttagctttac aaaggcagct acaaacatgc cctctcctaa gaaaagccag
65941 actcacttag cttcagaagt caagactgct cttcagaga acaccacca atttccagaa
66001 ctccagtgtt ggcttagtag cacgacgtgc tacagataag cggaaatgta cccaaggca
66061 gagatgctca gggcttcggt gccggcctgt gacgttattg ggaagtagtg gcaggtaacc
66121 ttaggagctg ggttctagag gaagtcaggt cactggaagc aggtgtcctg tgagagaact
66181 gtgaaacccg ggccctttct gccttttggg ggtaaccagc ttggttccat catgtgctc
66241 ctgcttctga cattttgtct cagaacagcc caaaagtaat agaatacaac gacagagcac
66301 gacaaccccc gaaactgtgg gggccacccc tctaatcatc tctgggtttt gccacatcgg
66361 agagctacag taacatcaca atggagagtt agcacataag ctaactgatg acgctaggct
66421 acccagaaaa aaatgagaaa attcagagtc tacctgacag aactctcagt ctcatcatct
66481 ctcaatctag acacagtagc agcagataca gggaatccta gcttcctgct tacggttcta
66541 tttacttctg tctttgtgca gtcacgatga ggattttcga atgtcttgcg tatctttgaa
66601 tatctggaac tggctagggt ggctatcgaa gtgtgaaact acataaagtt atacatgtat
66661 acatattttac cacatacaac atatcttaaa gcatgtgtac attaacccaa tcagcatcag
66721 cattaagtgc cattgttacc atttctgtgg tggtaacact ttcttagcaa tattcaataa
66781 tgctttatta accatagcta gtgtgttata aagctcactc ttctatctac ctaaaattgt

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FIGURE 6AA

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66841 gtaccttttg agcaacaccc cctaagttat gttcccctgg taacctgcaa gactctgagt
66901 tcaccctttt agattttatt catatatacg tgagatcacg tgggtgttcc ctttctgcac
66961 cttctatttaa cagtattcca ttacatatat ggaccacatt tttaccagg cactgtctgg
67021 aggatacttc attgtttggc tactgtgact agtggggcaa aaaaacaagg ggggtgtaga
67081 tttcaacaca actaacttcc atttcttttg gactgggatt gctggatctg ttgagacctt
67141 gtctgaatca agaattccaga agagaccacg aagaacataa gacattagga aacaacagtt
67201 cccacacccc tagattctag cctcaaagct gagctgagat tttggggggg ggggagtgcg
67261 aaaggaattc acatttgatc ctgtatttgt ttggatatta catgaacacg aaataatcta
67321 aaaaaatttg gcttctcata agacacgtaa aaattcacta tgtattattt caccaaaaag
67381 actcaatttt tttttttttt cgggtcaaaca agcatgcagc ccttgcattht aacatttcac
67441 aacatttact tttaaatctg aatcctaaca gctcactcag tggtttctgt gaactgtgaa
67501 acattatcca ctagggtggg tctgtgcaaa ataacgcaca gagtatcttt caatgcatcc
67561 tgggtggatgg tgaagagcac agaggagggg aagactctga ctgggatgtt gtcctgcaga
67621 ttcctgtccc ggagcagtga caccagacga tccctgggga gacgctgagc gctgggtcac
67681 cctcaccgac caggcaggag acctgatact caactcaatg ctttgcaaaa tgcctccaca
67741 cctgagccac gatgagaaca agatatcttc taggttgtac gatactcttc tgttactcac
67801 aagagaaggc tccaaggctc agcaccttcc cagctctggg atgtgcgtgc gactgcacgt
67861 gcgtgcgagt gttgggggtg ggggaagggt atggtggcac agatgtgtgt cactgtgag
67921 taaataccaa gtgtcttcc tctggcggtg acacctccgt tttctagata cggcttctcg
67981 ctgaaagcaa aggtcaccaa tggaccattc tggctagcta gggatctgca aaactttgac
68041 tgtcgatctc ctgagcaccg aggaagcaca ctaccgccc ctcctcaacc cagccagctc
68101 aacttagatc ttttaagcagg cactttccct agtaagccac tctctgagttc tggcccagcc
68161 tgttctaaca gaaaaccaga gagcccaga agctcagggc tctgagttc tggcccagcc
68221 agctttgaaa tttaccgtgc gtctccctca ataagactta cttttggcgg ggacatagaa
68281 gaacacagga tctgtccatg acccattccc agagaggagg gtagcctgaa tccgggctgt
68341 atagttccct ggggttagac ggttgagttt gggccctccg tacttctgt actcctgtct
68401 ggacacacat tcccgtgat cctatggaaa tataaggcgt taatttcta caagcatggg
68461 tgagatctga catctgtcaa ctcaagtcac catgctgtga ctccagctgc ccaacctctc
68521 cttacattgt ccagagtatc aacataaagg aagcaaggat accgaaaag tggttttcag
68581 gttggcacat ggaaaatggg aatcaaatat gttggtaatt aaatcaaata tgttggtaac
68641 tccagaggaa taaaagatca tcaagacgtg tctagtctgc ggctggaggc ctagctacag
68701 tttcattggt tgtatgaagt ccagccagct ccatgcaccc aagttactac tcaataaaga
68761 tggcggtgct aggaagacct ttatccttcc cgactgccc tctttctccc ctgtctgctt
68821 agcagtcagc agacaaccag tatgccatag cacgtgctct cagcgtgaa acacatgcag
68881 ctgcaggcca tggatatccct cttacctcga cttgcgaccc gtatttaatt tcatacatta
68941 ggatcaatcc gttgggggtt tccgggttctg gccactttaa aaagatggag ttttcgggtc
69001 ttggtcccca ggtcaccgga ccagggatat catctgctcc ttctgcataa ttaatgtaaa
69061 caagcagtea aattgggttt aggtccccag aaagaatgat aaacggtgtg ctaacttgag
69121 aacaactgtt cccccaatcc ttgtatatac aggactctgg acaggggacc ttgtaggagt
69181 tctttctcga gatggctgct ggcacagcgc ctccatcccc tctgactgaa aaaacctgtg

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FIGURE 6BB



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69241 gccaaagtaca agtgaatcacg cctgaaaaaac ctatgtaaca ttctccaggt ccatttttctt
69301 acctaaaaaag ttaaaaaaaa aaaaaaaagaa cccttcaaac agagcgcccc tggggaaggg
69361 cagtgaagcga cagcgtgctg agcctccagc tggggcactg acacattcac agcccacacc
69421 ctacacagggg agggaggaag ggccagttcc gaggctggcc tctgaggcag ctgttccggc
69481 cactgtctctt tccagccacc gctggcctca cttctggtgg tgaaccacag ctgttgggtg
69541 acagctgatg acagccgaga gaggcctggg gagataagct gttctctgtc tcttctagga
69601 ttgggaaact gaggcacggg tggctgaggg ctacacggga gtgccaaagc cgatctcaga
69661 agctcttact gcccagttc ccagcatgct ttgttctccc cactgactga cacctcctcc
69721 acgaatgaga agtggcaaat ggctggcagg gtgacaggca gtatctaact gtaggaggag
69781 gcccacaggc tgatctagct gaccacgagg acaacgcttc ctctgcatca agctttgaga
69841 cctggagggc ccctcacagg tctgtggtgt gctaaggcct ttgtgctctc agtctgtagc
69901 ctctggaact gagagaagaa aggactttag gagattgggc ttcaatgaaa gaagtgtatg
69961 aatacgtatgt gttgcttcat tgcaagcccc aaagcagtga gaggcaagtg cctgtggtct
70021 aaaactcctg aaacactgag accaaaataa acctttcctt ctggtaagac aactgccttg
70081 ggtatttttgt aatagcaaca gaaagctaac tcattcagct gtgcacagaa gggcacaggg
70141 gtgggtgtga gcatgtgcat cgtgaaccaa gccaaaggag gagagccctg aaaggggctt
70201 gtaaagagtg tctatggtta agtctggatg ggagctggca ctaggaatac attctctgtt
70261 ccttaggcac ctgacggacg acgttgtgta ccaacaacca cacattcgta ggcctgaatc
70321 taagggctgt cagcctcccc cgcttggct gtaagtggc ggcggggcta cctgccgtac
70381 ctgctggcat ggttctcgca aagacgaagt tggaggcgct gcagcccagc ttctcagcct
70441 cgtggttgca gctgtggata tctatgcggt acagagtgaaggaggcggagg ttggagatga
70501 cagtccctctc cttgttatcc actctgctct caaagaaagg gtactctgtc tcgaactcct
70561 ccgggtctgt gatattgtag gtgtcagcta ccgtggtgtt cctgcttcgg ctggacatgg
70621 tcgtgttggc cacttgcatt acgtctctcc gcctccttcc gggcctgcaa ggaggagaaa
70681 gaaggtcagc tgctaagttc tttagtttcc tttgtctttt ccatggctag ggtagaagta
70741 ataggaaagt cctagccttg aactaaaaga aactacttag gctccttgg taagaaccaa
70801 caaataacca ggattttcgc cttcacaacc catcctgtac tctcttgaga catcctcaga
70861 gaaacatgtg cacacatggt tctaggaaac agtgtgccag ccatttttag ccagacagtg
70921 ctctgtttta ccagacagtg ctacttggtc aggcctgata actgagcatt caacacgaca
70981 aaccatcagc ctcataagac tgggtgggaa aggtgaggcc taagacacac aaggtagaag
71041 agacccaaag tccaacagta gtggcttctt tgatcttctc tgaaatgaag atgccctagt
71101 ttaagcagct agcaagtacc taaatcccag cgcttttctc gaggaacagg gtctcctatt
71161 gatgaatgcc ccagtcctc agtacacagc atggtcttgg aggttcattc aacctggctt
71221 tgcattctcc ttggcagtga gcttgtctgt gataggagcg gagcctctgt tactcactga
71281 cttgtgttag ctttaagaaac tacagaaaag caacaggaac agagctctgg gctccctctc
71341 ttccagaaaa aacttctaac attcataaaa actgaaaaaa aaaataaata aaaatatgac
71401 atcagataag cagccctatg ggctggaagc aaccctcagg ttgtctgcag gtgaacagtg
71461 ggcaagctgg gtattgaggg tgttgcctgg attgcttgtg acaggacaaa ggatgagagg
71521 aacaggtggg actgcactgc gtctggttaag aacatgacag agtaagacaa aaggagcct
71581 agagtacggg gctcgaggcg ccttgggaagc catgcccag gcctatggat gctccctagg

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FIGURE 6CC

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71641 ccaacatctg ggagagtaca gtagggagtt gggggaaagg gccgcatgct ccctgggtctt
71701 cagcagatgg atctgctacc aaaaccatag ttctttgtcg ggtactgaca tgccagtttc
71761 cattgaaagt atatcaactg ccataccagg gcccatctca aaagtttagga atgggggattt
71821 gttatcataa tgctggggaa agagatagga aatgagggta ctattctacc atgctcacac
71881 ccagcaaacc ataaaccgac caatcaacaa accatggaag gaaagataaa ggaaactact
71941 ttttcaggta tgtgtgtgcg tgcagcatg tgtgctgctg tgtgtgtgtg tgtgtgtgtg
72001 tgtgtgtgtg tgtgtgtggc ggctaggcag atgttcaaaa cattattatt aaatttctctg
72061 cctccctttc aaaccagagc aacacaaacg tgtgccttca tgtaagaagt tgcttgtgtt
72121 tgattttattg caaaatgata ctggtccact tcttgccttg accaccccc aacaaactgg
72181 gctatagcac caagcagact cagtggcctc cttacttata aacactgcac tcttgcatat
72241 tattcaacag ttactgtgga cacagagtca ggaccatgaa gggaggcaat ataggcatca
72301 gaaggctagg gatgattcaa acagagtgtt ccagggggtg gcaaacagca cactatcagc
72361 tttccttact ccataaagta tcctgatgct actggaaaaa cttgtactgt ttaacatctg
72421 agaattgtttt agtgacagaa acatttttga agcgtcttca aaaatgaaga tggcgcccaa
72481 tgaaagccat ttactgatac caagtttagg aagtaacttt ataaatagta gcctccactc
72541 tactataaac tcacaggcaa agtcagacaa tgcagaaaaga ctaaactctga tatatttgcc
72601 ttcagcccc agataaacgt gcacctagaa tgacatgaag gtaggaatag gttttaggta
72661 aactcgggtt tatgatgaca gaggttgctc tgtcatctag ggtgctcctt tatgggacct
72721 tgcgagacct cgtatagatg tcagatcctt gcctcggtag gaggtaaaaa acaaccccc
72781 aaaccctaata ggccagggtg ggtgaccctt atctgcatgc tgggtctgtt ttaggacact
72841 gaggtgagga cacttacacg aaggaaatgt accgagagaa aattcgtttc aaaccacag
72901 tacaagccct gcacgggtccc atctgggtca accacagcct tgccgcccc aacttagcc
72961 tagcgttaca cagctgatga taacagcagt caciaaagtga tgtcatctga gtataactaa
73021 acaccaaggg ctttctgcta tggtcgggtc acccttgggt ctcagtctgt attgttagat
73081 gtttggtcac tagtggggca gctgcaggag gaacctttag ggaatgggtc tgttaggggg
73141 agatcctgat gtagcaaaaca agctaagtgc tcaacgtctg ttcagcttcc tgtctgccct
73201 gaaatcgctg ctgtgccata agtacttttg ccattgcgaca cacccaaaga tgccttcac
73261 aacaaaagcc aactgggtc cttgttcttc taactttaaa actgttgagc tatgcacacc
73321 actaagcatc acgcaatttg ttagcaacaa tgaaagaacg acctaaacct ctggccatgc
73381 ctacaggagt cctggatttg actgacaccc agtatagggg tgggtatggg aggacctctg
73441 cctggcctct ttgggacgct ccatacctgg ccactctcat ggctactctt actgagtgtt
73501 gggttcagggt gaatgctcca catagataac ccaatgaagg gacggagggt tgggtgttgg
73561 gaatgtaggt ctgagaccca agactcaaac agacagtaag ttagtgagga tagagggtcac
73621 tgcattcagt ttttaaagca ctttttgatt tgtttcctgt cttcagggtc ttaaattcaa
73681 agaaacagac atgacacaga ggggaacatg ggtaaaagcc aaaacagcag cgcctcctgt
73741 cagctgactg caatagcagc ccagcagcct gccaaccaac aggagctgct ccgctggggg
73801 cagatgggag catgcacagc ctaaggcatc aaatgtagcc tttccaaagg gcacactcac
73861 ctgggcacaa agatggaatt gtgaaggaaa ttctcaaaga ctttacggta ctcagcctcc
73921 tccttctcag cctgcttctc agcttcagtt ttagggcaag cgcagcatgg ccctttatca
73981 ccaccacaca cttctgtctt gggattttcc gtcacctcct ccacgtcgat ggtaccatcg

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FIGURE 6DD

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74041 gcgtactttc tgatgggtat tttgtctgct tggggaagac cagagatggg aatgaaagcc
74101 atgcaggaag tgcctgttag cattgctggt ggaggggagg ggtgctggtg tgcactgctg
74161 agaagcaagc cctgcaacgt gacaggtgtg accctggggc tcaggttctc tcagacaaca
74221 gacaaggcca gtggcactgc ctgctgctg cctgccagcc cccagctcac ctttggagca
74281 gtagttgtgc cggtagcagg aaccatcctg gggctgccgc tgccacctca caatgtagta
74341 actcaagtta ccattgggca gagttggagg attccacttc acaatcagct gagaggaaga
74401 gttttagtgct gagaggacat ctaggggaat ggaagggact ggaaagaaga acaaagaaca
74461 tttcagagaa tagaccggaa tccgaggttg aggttatcag gggctcgatg caaaccaaca
74521 ggaagctgca ggcttgacct gggcacagag atagcaacgg accaaccaga gcatgaggtg
74581 aaccagagct ttggaaagat taccaactgg gaggccagcc ctctctcaga gcacttgctc
74641 ttagataatc tatgtgcaaa cacacatggc tctactgacct gggactgaag gggctacgag
74701 ggcatatgctg gggttaaagg gfactctaaa aaaaaccta gagttgattc agttatgaca
74761 actgtcattc tccggtgtgt attaggaat ggcaaattgg acggcttagt acttcacctg
74821 tgattgcaag ttttaatctc tgataaaac ttgataaaca tgacaggag ccaaagtga
74881 gagtgggagt gggggatgga cagtgtgtgg ggtggttatg tgcctgggtg aaaggactgt
74941 gaaacaagga gcagggactc acagatcttg taagcaagtc atgattcagg aaagccagta
75001 cgcctgagcc ctgattctat gcaaagtcct gttacaagca aatgagttta acaaacgac
75061 ggaggcttac atactactga tgcccaggct caaaagtaga actaacttac qtaaaaagga
75121 aaacatccca ggaccactgc tgtgtcctca ccatagcaaa agagatacca cagccgaagc
75181 gcaccccatc cccaacacac acacatgcac atggcaaaaga atgaggccca ctggttttgg
75241 cagtttccaa agtgcaagag acagaaccgt ggttatgaca cttagaata aggtccaacc
75301 aagctgtttt tgaatctgaa aggtgaaaac aagcttgtag cggtcagtct tatgacaact
75361 tggcacaacc tatctgacag aaaaaaacct caactgagag gatggctcag tatgatcagg
75421 ctgtaaggca ggcctgcagg gcatcttctt aactaatggt tggaggagga aatgccagc
75481 tcattgtggt gaggaggcct ctgggctggt ggtcctgggg tctctaagaa agcaggctga
75541 gcaagccact gggagcaagc cagtgttctt ccaaagttcc tgtctctgct ggagtttcta
75601 ccctggcttc cttaacggca gactgtgac ctgatgtgga agtcaaatac tttccttgcc
75661 aggtcatata ccaccacacc aacaggaagc gaatggacag agggctgtta ggatgtatgc
75721 ggtgctcaag gctctgagaa ccactgaggg acaacacgtt ggaagacca gactgatgca
75781 gagaagacaa gcacttgatg cctggtcccg tgagcgtttt caataagtat ttccaaaaca
75841 gtttcttact aggtatttca atgacaagtt tcccagatga agcagaggca catgatggac
75901 taagtacgtc actatcggtc ccaagcactt ttgaggtcag ggaccaaata cagtttttaa
75961 tatttaggaa gaagaatagg atttcttaag aatctgctat aatgataaga aattcctgct
76021 tagttttttt ttttttctc tcagatctgc tgcaatgatt cactgggagt cattactccc
76081 aaactttaag atgagaaatg tattcagttg ctttgctctt ggaacgggtg atatgtttca
76141 ttgtgttgta agccactcaa gtcgatggaa tttttgttg taagagggtca gtcattatct
76201 ttacagtga gcatatcttt ctacctctct cgtctttgga taaaactca cacttttget
76261 tttcccaact tctagggtct ggagctgggg aactagtacg taaacacatg aagaagatga
76321 gaagggatta gtcaataatc cgatatcata gtactctaag cctgcgttcg cctgttgaga
76381 aagctggttg ctacggaata aaggtggaaa gccagcaagc cactagaggc aaggggtgca

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FIGURE 6EE

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76441 ccggtcattg tcgtctcagt ccctggaagt ctgcactgag agagaggaga ccagccacaa
76501 gtggctacat cctgggcatt cagagaaacc atcctactgc tctggaggac accgattcaa
76561 ttgcgtagag cagagatggt gacattttaag atggtaccaa gtctaggaaa tggctcagga
76621 gaacttaagg tggtggcagt gagaatgtta atacagtgtt aagcagcaac aacaagcatc
76681 tcattgctag ccctccagcc atactgtgcc tatgtaaata aagcaagctt ataaaaattc
76741 agggaaacagg ggttggagggt tgttcctccg gtgcgtggat acctgaagca ttggtgcgaa
76801 tgtacaagat ttcacttttg gccccacgga tatggtcgtt ttccaccatg gtgagggtca
76861 cagccttgac atagacagca tactgggtcc agggcttcag cccatgcagt aaaatgccag
76921 gctcgccctc cttgttcgga ggcaggtcta catccaccat gttccagctg ttggagccac
76981 aggcacctcg cccgtcatat tccgtaacgt ttttaaattg tctgaaagac agtcaacaca
77041 ggccagagaa cggtgaagggt ctctggcatc aaaactccc agaacttcc ccaggggctg
77101 aacgtgtcac actttctatt tctattggga actccaaata aaactcatca tcaattagat
77161 ttctatacaa aaataaaatc aagcatctgg actcgggagc tcgacagcta tgaaccgcag
77221 aactgacaag cagccttaga gacagcaagt ccctcattca cagggactga aaatgctgcg
77281 tctaagacat gcggatgctc attgtcttct taagtgagag ttaaaaacaa caacaacaac
77341 atcaacaaaa acccaactaa tgaaaaaaaa aaaaacaaaa aacaagcaga gctgtttaat
77401 gcaaacaata aactaataaa acacaacttt tggacaaaaac taactttcct atccccctag
77461 aactctaaaa tgtaattcga taatagccat ttttatttat ttttattttt acttttttgg
77521 tttttcgaga caaggtttct ctgtgaagcc ctggctgtcc tggaactcac tctgtagacc
77581 aggctgacct cgaactgcct cccaagtgc tggatcaaag atgtgcacca ccactgcctg
77641 gctcataata gctatttttt ttaaacaatt tttttagtag atattttctt catttacatt
77701 tcaaatgcta tcctgaaagt ctctataacc ctccccccgc cctgctcccc aaccaccca
77761 ctcccacttc ctagccctgg cattcccctg tactggggca tataatcttc acaagaccaa
77821 gggcctctcc tcccaacgat ggccgactag gccatccttt gctacatatg cagctagaaa
77881 cacgagctca ggggggtatt gttagttcat attgctgttc ctctatagg gttgcagacc
77941 ccttcagctc cttggatact ttctctagct cctccattgg gggccctgtg ttccatccaa
78001 tagatgaatg tgagcattca cttctgtatt tgccaggcac tggcatagcc tcacaagaga
78061 cagctatatc tgggtcatgt cagcaaaatc ttgctggtgt atgcaatagt gcttgcgttt
78121 ggtggctgag ataatagcta ttttcgatgc ttaactatct cataatattc caacactttg
78181 tttcctgatt gtctcagaga gtggcattgg tgataccacc agttagcatc gccagtgcac
78241 tggcagcact ttcaaaggga agggagggt ctgcacagat gcatggtagg cgggggtgtct
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78361 gtgttcgata acgatgggag aggggtggcc cccatttaca caaacactga gtgattttga
78421 gctttctatt ttccctgggc tataacagtt cccaggaccc taggtcaagt ggcagcgaag
78481 ataccaggca ctgccaccag cacctttgct tctggaaaga tcagtgcctg ggaaaacgga
78541 tgaccacaca gactggggaa accacctggc cacaggaggc tgagtaggaa aatgggacag
78601 ctcaggaagc tgtgatgtgg agtaagcagg atggtcctat cagggaactgc tgacacctag
78661 gttegtccct cactattctt taatgctaga gggctcatgg ccagagcaa agtcttggca
78721 aggccatgca tgcataagt gactggaaga caatgggtca gttcagggtg gccttgggtg
78781 gaacagagca ccccatgggg tattttgggg -gacagaggct aagacaatat ttaaccaagt

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FIGURE 6FF

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78841 ccacataatg gcttatgaca gtttggaggc attcagttct cttaaaattc atcccccttc
78901 cccttggggg gaacttactc aaacaccata taaacaatga aagggctgag gcgggacact
78961 tccctgacta gctgctgtct caggttggga cagtttaata tgacaactag agaggtcaca
79021 tgaggatgag gtgacgggctg cctgacttga ttctttatag gtacaccaa gactctctat
79081 tcagccaagt cacactgcca cctggccgctc cccaccctca agcttgacat cagagtgaga
79141 ggcccaaact cacgcctcct tgtagtaaac tgtgaagctg atgagatccc ggtagtccgg
79201 cggccgggtac cgggtccacg ttatgatgat tcggttcttc caggtcgtgg tggagggtgaa
79261 acggagaaca tcactttcac ctggggcaca gaggcacatc catgagtgc agaaaacccat
79321 ccgtctctgt gatgtcactc tgagagaaaa ccctgactgt gcttccaaag gcaaactctat
79381 ggctggcgca ctcacacgct gtcaggctcag gctggctgcc cctaaggagg aagccctttg
79441 aaatgctccg atcacaggct tctgctatgt tcttgatggg gaacagggtca gggggctctg
79501 cagaaagggtg-agggtgctgg-ctgtgtacac-acttaccacc tctgcctaac tactcttctc
79561 aagatgcctc ctggatccgt agagtatcag ataatctgg atactcaaaa gacaaggcta
79621 gccctcccc cactatgtatg cacacgtctg actagctgtt ggtcacacag ctctgattc
79681 cccactaatg ctatataatg acggagggtc aatagagct ttagtatttc tgtttgtttg
79741 tttttgtttc cttaaaacag ggttttagat gtagcccaag ctggcttcaa actcacaatc
79801 ctctgcctc agcctgttaa gtggtgagat tataggagtg taccatcatg cctagctcca
79861 tacagtgcta gaggagagac tgacatccag gtctgggacc acatttggag aggggctggg
79921 ttaacagggtt gaactctagg ctatgagatc ttaggggtgaa aactctcatc accaggatgg
79981 aattattact ttgtccaaca tgtgaaaagc attccgattc aaagacatgg gctcactttg
80041 ttctagaagg agcagggcag agaaaaggag ccaagtgtga ggacaaggac actggacgtc
80101 cagggaagta ttatagtggg gcactctacc tgatccttct atggcacagg agagaaaaggc
80161 agagctgacc tggagtggac tggctcttcg gtaaatattg tttgctcata ttgaaaagggt
80221 atttaactgt gcaagctcta agaacctgct tggatgttta atagactcaa atggaccctt
80281 agaaaaatat atcagtatga gtgtatcagg caccgcacca ctaatatgca gaggccagge
80341 actggctgca gtggtttgac agtccatggg gaaacaaaga gcccgcaccac ggatgccaaa
80401 gactgttatc tggactgtgg cagtcaccagg ggtctgagat gctgtcactc acaggaagct
80461 cgctctccgt tgttcctggg gtttatgtcc cctttgctct ggcgtccctt ggtccgggtc
80521 acttcctcca tgcggtaaat ttcggagaca cacagcttgg gattgaaagc aaagtacatc
80581 tttccggacc tgacgggtcag gttccgggtg ttcagctccc acagctgctg caagtctctg
80641 ttgtctagga catagaagga gtagtctctg gaagcacaga aatgcgcatt agcaacgcac
80701 tgagcccaca gccccctcag gcgacagaga gcctctctgc ggccagtgtg gttccatacc
80761 aacaaggggt ttgcttgctt actggggctt tataacagca gacagtggcg gtagccactg
80821 gcaaaaagat gtgccaagga caatgttttg aaatcgactg gacactaatt aatttcatga
80881 cctctattac caacacacaa agcttctccc accaaaggat gttccttgat tcattccctg
80941 ggaaaatgcc tttggttatt tctctcagag ccaggatagg acaatgtgct tgaaatcagc
81001 ctacaggcga acagacatgc tccgctactc aaccggaaca gcttacatac tagcagcaaa
81061 ggctgccatt atccctagga ataaatccta ccatgcccc atcagcagtg catgatggga
81121 tgggagacag cctggctctc tgtacatttg cctctcgtg caagaagcct tcatttcagt
81181 ccctgagtac gtgggagagg acagacatcc agtgtctccc tgggctctca catcagggtg

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FIGURE 6GG

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81241 gctagatgca gcgtgtaaca tgggtggcttt ccacatttag tatgtacaca gcttgttctc
81301 agtatcccct accgctagag cttctgggtgc agaggccag agtgaccag gaatctcgat
81361 gtctagcagg taatgctgat aaacaccagt cctgggtcca cccagaaact accaggccgg
81421 ccacggcact gtttccaagg cctaacttcc actagagggg agatatgggc atggccaaag
81481 ggaagatagc tatcttaggg ggccaagggg agagcaagga ttctacttgg gtgtctgcat
81541 aagttttttt ttttttttta aacagttatt tctaaatcca cccacagacc agacaaacat
81601 gtcccaaagt cctgttctgc cctaaaggct gtgtccacct aggcaccacc tgctgagagt
81661 cctcaccac attagaacta ctgcctaggg ggtctgcttt caacatgacc ttcacatact
81721 gagaaatgag ttacagctgc aggggttgcca agcctctccc gacacttccct ggagaactca
81781 ttagggagct cagaggccag gaccaggac cggaagagcc atgaattccc cacaggacaa
81841 gccacaggca gtttccctcg tgctatgaag agcagcggtc atgtgcgtag gtgaagtctg
81901 aggtctcggt gggtttaaga ttccttatga gāgēcagtga gatggcteat gcgtgeaaga
81961 gtacttacat cacaagtctg gtgatcagga ccccgagaag gaagaacagt tactgtgtaa
82021 ggctgtcctc tgacctctgc acatacatcc ctctcatagg taagagtcct cacatggagg
82081 agtcggagct caagtgtgag ctaagcagtt gaatggaagc cccaaccctc cttgagcact
82141 tctgcgcagg cttcagcgca gggctctgcac acgcacgggc tcaatgagcc gctagccttt
82201 ggtaaggagt gttcccctac catgcttgtt tattggagta ggaaacaaag accctgatca
82261 aaggaatcca gatcgtagta cctaagagtg tatgtcctag ggaggtcctt ggatacctgt
82321 cagtcagaac tgccacctac gggaccacc aatgttcact cttattgata tgggggtggt
82381 caggataggc agacaactga aggatagggt taatgggtgga aagattgggt cccattaggt
82441 gtcttgccca accatgggcc attcttaaac tgctgcctca acgctaacct caccggctctg
82501 gctgtcccca agtcttgaga gtcccaggag acaaaaatct cctgttattg aagacacctc
82561 caggccggat acaagggcca actaatcagg tcaaactccc atctccatct aggccaaaggc
82621 ctcttagtaa actaatttct caagcaggaa acagaattgt actgaaaata ccttcccttct
82681 gagccacaca ttcttctccc cagggaggga gcatgaatta gaaaccagga atttgacaaa
82741 tgaatggcag gcacatagaa actcagggtg tttgactaat cactttgaaa agcaagatta
82801 tcttttcaca gttaaacaaa actttctctc tttaaacaat gcagagaagg ctgggagcca
82861 gaataccaat atcaataaaa tccaggcatt gtggagccta cagaaggtaa agaaaaataa
82921 aaaccttcac caaaataata atcaacctgc tggggagggc ccgtccacac agtgcctgct
82981 tcccaacccc caccgagggc ctgcctcctc aacaccttct cttcaagata ctaatgtcct tgaatggtca
83041 atatcccag gtggagattt gtctacacac cttcaagata ataatgcga cttcataaat
83101 ttgttttctc agggagatga ctagttaagg gaaccactca ataatgcga cttcataaat
83161 cgtttctaa gctactgect ttttacatcc acagaatatt tttaaaaac aaactgttca
83221 ttttttttcc tttggctcct acacgtctga tgatctcccg gagttttatt gagtgggtatt
83281 ttggctctta gttegatect tcttcttctc ctaccttctc ttctgcaccc cccccacccc
83341 ctcaagacag ggttctctctg tgtagccctg gctgtcctgg aacttactct gtagaccagg
83401 ctggcctaga actcagaaat ccacctgect ctgcctccca agtgctggga ctaaagaaat
83461 gtgccaccac tgccctggtag cttgtagctt tttcaacatt agaaaaaaa atcccccta
83521 ttggatgggt ttcacctgcc aatgcataga cctactagga tggttagtca acaatttggg
83581 ggccctgtca catgataagc tcacagccaa cacttagcta tgatctgtgg ctaccatttc

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FIGURE 6HH

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83641 taggcctccc ttttaagtga agactgcagg ggaccgagtg tagagtcttc catgtaggaa
83701 ctgataacca ggcccaagca ccttctccac tgcttatgaa gtggcacctg aatgggtttac
83761 tcagcttctc tagggctgct gggtctcagc tgcccatgga gctatctttt ctgggtctctt
83821 cgggccccga ggccaattga gaagaactgg atgctaaata taaaaggacg ttataagctt
83881 tgaatcacct cacaaaggca caggatgacc tgtgctactc tctgaactgt caaaagtccc
83941 ccagaacaaa gtcacagaaa ataggtaagt cctgcacctt gatacaggca gggctgagct
84001 caaggctctc agcctacaca ggacccctct ttcaagctct tactggcatc ctggaagcac
84061 agacaaccaa taactcatat ccatttttgc aaggagacac tactactgcc tgtgacagct
84121 gtctctagag ggcacagaaa gccagtacac tgaagctgtc accagtacag tcatttataa
84181 cactacttag cccatctgta gaattattgg tcaactcagg tccacagtta taccatctac
84241 aaaggctcag ttagtatgga aatatatacc caggcaaaac taaaccaagc accacataga
84301 ttgacaaaat aggccgtttg ttcctgagtg ctttttaaaa acagctttgc tgagggtacgt
84361 tttaccttct aaaattgttc ccactataaa tatacagctc catgggcttc aataaattta
84421 tacatggc caatcatctt tcaatcatcc agattcagaa catttatatc aaactgaagc
84481 cccccccccc attcttctcc catccaaggc atttcccctg tctgttcacc caggatgcta
84541 catgtaccat tggctagtat cttactgtgt gttttgcgct tatactgagg aacccttaga
84601 ttatatctaa cgcaccattt tgagaaaata ctatggaaaa tgttgctaag agcattcaca
84661 tgtgatattt gcatacacat gcttccatat ctctaggaac agcctagact tgctaggcaa
84721 agtaactaat tgtatgtatt ttaaaagtcc caagtatgtg ctaaaatgtg gttatgttag
84781 ggtctagttc cagagatgca gggcacatta caaaaccctg agtctgcaa gggtagagat
84841 gcctaaacag actaagaatt ctaactttat actggcccc ttccagtatt tttgttctgt
84901 tcaagacaat aatctttggc agcacctaag agcttgaact tttcatttat ttgattgtc
84961 ccaaaccaaa gttgtccaaa gcagagcatt ttttttttca gataatggaa atattttctc
85021 tcttattcaa ggagaaccac atatccctat ccccagacaa aacttgattt tccttcttaa
85081 tcccccccat gacccccaca ctttgcctaga gatcaggtag caagcaccac aactcttagg
85141 ttaagtgtc tatcactaca ccacaccact acttctgaga aaacccttc ctttctgtgt
85201 ctgtccttga gtacacagac gtgcaggctt ctggacacag gagagagaca ctgggcatcc
85261 tcctgttact ctctacccca ctgtcctgaa acaggctgtc tcacggagtc tggctcaggt
85321 caggcaggtc atctgactag caagttcttg ggatcagctc gtctcagctc accacctgga
85381 gctactcctg ggtgcagcta ggctcagtc cgccgaggat tcaaacacga ggcctcatga
85441 ttgccaagca agtacactta gctagggagt catctctcca actcctatga tcttatctga
85501 agttgggatt ctacagctat gccacactac agagagagtg atggctgaga ccaaagggtc
85561 ctgctgttac ccaagtaccg ttctgtggct gtgcaccctg atgtctgtc tgctgggatt
85621 ctgcttcacc tgtcgtcggc ctggaaatca gtgtacagaa atgtggcctg atgagcatgc
85681 atgaccagg taagcaggcc cagaaagaaa acacaggaac tacacgccag gcaaaacact
85741 tgtgttccca cggggggcta ccgagaaggc caagatcaac tgcagtgtt tcctggatag
85801 ctaaggctga aggatacctt catgggggtg ggggggtggg tggggggaaa tattcctctt
85861 tccatcaaga cagaagtctt cagaatcctc ctgagccgca cggaagcatt tatgccattt
85921 tcagtagcca tacaaaaagc tcaagaaata gattccttca acactgagtt gaggcaagat
85981 tgcttaaaaa taaaataaaa tataaaataa aataaaaact cagaagtggc ctgggactat

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FIGURE 6II

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86041 atacatttga aggatcacag ggatagcgaa gtcatttcta atcttttgcca tgtgccaaac
86101 atacacagaa atactcagaa agttactcga gcttatgctg gcaactcccc caccccaagt
86161 tttctgtctg acttgggggtg aggtgaacct ggtgaagttc cacagggctc ccctttccct
86221 gtaactgtga tgtatccaca cattctggga aacctgggg ggagggggag gaggctatca
86281 gtataaacga cagcaccctg aaattaaatg tcagataact ctgctaatac acccctctc
86341 aaaatctcca gtgcgtccca aggcctacct aaatgataac ctctacatct gcatgcaaca
86401 gtgcctccta taatcctagt actgcctacc tccccagga gctgaacaca agacaggccc
86461 aaatgtcatt ctgtgctctc tcctcttctg tccctgtgct ttctagtccc ccaaaccctt
86521 ccaggccagc tttgctcaga agcctgtgtg gccttctcca ccagagtctt ccttttggt
86581 cccagagcac cttctgtcct ctccctctgg gctctctgaa gcctgtgctt tgcactacct
86641 gtgttcatct gcttattaca aatctttctc tcctttatta aataagttag gaagaagtga
86701 accagctgag ccetaatact atacaacgag agacaaaggc gagttgttgc tatgggtggs
86761 ccctcaaagc tttggatttc atcacagtta ccagagaaag ctactactaa agagtctcaa
86821 atgtcctggc cagagatata cttgaagcaa gaggtctctc acctgtgggt ttagattcct
86881 ttgaggtcaa atatcagaca tccttcatat catgcattta cattacaatt cataacagta
86941 gtaaaattac agatatgacg tagcaatgaa tagattatgg ttgggggtca ccactacatg
87001 aggaactgta ttaaagggtg gcagtactgg aaggctgaga aacctgttt ttaacacaa
87061 gtctccaggc ctccactgcc ctccactccc ttctcaaag ctaacagcag ggctggcgct
87121 agctttccag ggaagcttcc ccaataccag aatccttaac aatacttggc tgatatttat
87181 agtagccaga agctggaaac aacctagatg tccctcaaca gaggaatgga tacagaaat
87241 gtggtacatt tacacaatgg agtactactc agctattaaa acaatgact tcttgaaatt
87301 tgcaggcaaa tggatggatc tagaaaatat catcctgagt gaggtaactc aagtcacaaa
87361 agaacagata tggatggacc tcatggacc acatgaagct caagaggaag accaaagagt ggatgcttca
87421 cacaatacaa ctcatggacc aatataatca agggaagtag aggggtgggag ggatttggga
87481 tcctacttag aagggaagac gaaaagaggg tgcagagtca ggtattgaag gagctagagg
87541 agaagaaagg agggggaggg aattgaacag aggggatggg gaactggagg tagcaaccac
87601 agatgtacag agggtcagga atgcgaggaa agcaagagcc tcccaggacc ccatggagat gacattagct
87661 aaagtccag atgcgaggaa aggagaacct gtcaagacca tatccagagg ttagactgcc
87721 gaaataaccc acaaagggga ggggcaacce acccatcttc aaagttttaa ctcagaattg
87781 cccaccccc gttgaaggat agggacaaag agtggagcag agactgaagg aaagtccatc
87841 ctctgtctta aaggaaatac gatccatctc acacgcagac accaaacca gacactattt
87901 cagagactgt cctacctggg cttgctgaca ggagcctgat acagctccct cctgagaggc
87961 attgctgatg ccäagaagtg acagatgaag aggctggcag ccaaataatca gactaagcac
88021 tctgccagat cctgaccaat tagaggaaga actgaaggag ctgaaggggc cttatctggc
88081 agggacccca atggagaagt ttggtcctgt aaaggcttga tgccctagtg tagaggaatg
88141 atcaatggga ggggagggcc tgggtgggtg ggggagcacc cgcatagaag cagggtagg
88201 ctagggcagt gaggtgggac gcagagggga aaccaggaaa aaggataaca tttgaaatgt
88261 tgggatggga tagaggggtt taaaaaaa aaagacttgg ctggtacttc atacctaagt
88321 aaacaaataa aatactcatt gctataaata ttcttgaaa taaaaaccag ccttcaattt
88381 tttgaataat gaaaaaatag

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FIGURE 6JJ



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88441 tcagcaacat ctaagtgtat gatactttta gttaaggcat aatgataaga taatcatacc
88501 atgtaataat cctgataaga aataatcaaa gcctcctttt gactttctat gcctatcgct
88561 tgctcagtggt ggaaaaaagg ggtgggggag cttatcctcc agtaactaac agatctgaca
88621 gctactaatc cgccaaggaa aacgtgcttc ccgatgtcag ggagtatagg gcacagatct
88681 actgggggga cataatgaaa cgagatggag ttacagttca ctttaaaatt taatacaage
88741 aacaatgaat taagggtgac cacggcctca tgtacgggag gccccagaat gattgcgaca
88801 ctctgggcag ggtacctggc acatgcagaa ggattcgcaa ggagaaggag gtttttctga
88861 agcttctctg ctcgcaatgg gaagatggac ggggtgagca gctctgtttc tggctgtatg
88921 taccagggga agaccaggc cagagttggt gtgagaaaaa ctggagggtg taaagaaacc
88981 tcatccagac ataccagcct ggggacaagc cttctccgga tcttccgctc actgtctttc
89041 taagggccct gattgcttag ttaatacacg tataaaaactt caaagcatta acacagagct
89101 acaccagagc cytagcaaat gtctgaaggg gccagcaagg gcacacaggc cagagtctgg
89161 aaagaagctg tgtgcacatg cagtaagcac cagctttact ctctgctgag aaaccacagg
89221 ctgctttaaa acccagcttg caaagcattt ctgtgcagaa ggcacaacc cttatcaatac
89281 tccaaatcct gaaagctgat caatacacag acgctgtaag ctaatcaatg tacaagctct
89341 gcaagctgaa atatctctgt aataaaatga actgtccgta ctttgcaatt ctttctgctt
89401 ctctgtttga aaaggagatg gcttgggtgt cagggtgtca agtgcttget gtacaagaga
89461 acccacgtaa catgtgcctg aaatctcagc acttagaaag tggacacagg gacatctctg
89521 aggcttgtca gccagttagt ctacaaactg gtgagctcca cgttcattga gagacatact
89581 caaaagataa gatagagaaa aaagacacc tgtgtctcct tgaacctcca gaggggtgtg
89641 acaaatatat acatgcatac aaatgcattc tctctctctc tcacacacac acacacacac
89701 acacacacac acacacacac accccagagc acagtaggct gaggcagggt aagtgtcaga
89761 tgaatcacaa tttccctggg agttaagcac cacaggcagg ctgctgtcac tcttgcagga
89821 aaggttccct gggaatacct tggactgcta gaactcagcg ccctagctta gactcgtgtg
89881 gtggtttgga tgagaaatgt caccatggg gtcacacatt tgaacgaacg gccccaggag
89941 ttggtgctac ttggggaggc tgtggaacct ctgggagggt ctgccttget ggaggaagtg
90001 caccaggagt gggctttggg ggttcagggc cttacctcat ttctgtctc atgtttgcag
90061 tttgagatgt gagctctaac cttttgtctt gctgtcttat tgccatgcct ctcccaccgt
90121 tacggatgct ccccattata agctcctcct tccctaaggc attttgggtca tgggtgtctca
90181 tcacggcaac aaaaagtgt actactacga tatgcaaccc ttgatgactg caccttaaga
90241 atgaagacac ccatttgcca aattgttagt atcctgtgac aactccacag gacttagagc
90301 aggaagggtg gtgaccacct aggcagcagg agcaggccca gggtttcacc ttcattctgc
90361 gtaacaaacc caaggatatt tgaaaagtac actaatcggg gctgggagct ggctcagccc
90421 ctaagggtaa gggcagctgc tgtcagggtc ctacaacgag tggagttgaa cccccaggag
90481 ccacttgaca aaaggagaga ctgactccca caagttgtat tctgacacac atacacacac
90541 acacacacac acacacacac acacacacac acacacacaa acactattaa gacgcagcac
90601 gccacagttc tgtgaaagga gaatggagtg tttacccttc cagctgctcc tctcctaaga
90661 tgagacgaag gttcttcagg aaggacaagg agaccaaggc atgagaatgg cggatcttca
90721 cgtagccggt caccacctcg atgagcccca tgaagttctc caactccgag gcaatgttat
90781 ctagagaaaag aggagtccat gtcaccgagt cttcctctgg tcagggtggcg cactatactc

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FIGURE 6KK

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90841 agattcacac acactgggtgt ggatgcgaag gggaagcagg tcttgcggtgg gggaattgca
90901 gtgagaaggc tggcatagca ccaaccgtcc ctgtctccac tctccgcaag ccacaccggg
90961 acaaggcctc tgaggcggga aagcagactt ctaggaggct ggctgtgca gttgccaagc
91021 tgattaacag aacgtgaaat cagaaatgcc aggctgctaa ttagccccag ctgacaaatg
91081 gaggcaacat ctcttagata tgctcagtga caggcagtc tggctccaca gtgcatggc
91141 aggactgggc aaacctgtcc cagcctggta agaatggtct ttgctggacc tggagtcca
91201 tatttaaaga ctccatttag ggctgcagga aaacactcca atatcacagc aatgatgcat
91261 gcaggtagtt gatctatctt tccccaccct ggatcgagac aggggttcat gtatgctaga
91321 cttaagatga ggctgaactc ctgatcttcc tgcttctctt ccctgatccc tattcctggc
91381 ctgcaggcag ttttgttttg ttctctctct ctctctctct ctctctctct ctctctctct
91441 ctctctctaa ataatttctg catctctaag ttttctatcc tgctcataat tacttctgta
91501 accagaaagt tggcaggaaa agttgctaag gtaacaggac cgagagccag tgaatttctt
91561 ttatcgtgct taccacctt tcacatagca agtaacataa actttgggtc atgacaaaat
91621 tctaagacta taataaatta ggtgaatggg atttttatta tatctgattc ttgaagggtg
91681 atttggtgaa agtttctcct atggtttgat ataaagaaga ggacaaaagc cttatactaa
91741 gtctgagcct cacagagtc cctcacttgc aaaatacata cagtgtctagt tgtatgtaag
91801 ggctacaggg aattcaacct gaaaaaaaaga gtggctgctg ctaagcctgt gttttgttcc
91861 ccaagaattg aatctataac ccctgtgtgc aagacaagtg ctctggccgc cctgaactca
91921 ctctgtagac caggctagtc tcgaattcag agatctgcct gcctctgcct cagaagcact
91981 aggatgaaag gtgtcttcac tgtgtagacc aggctagcct cgagttcaga gatctgcctg
92041 cctctgcctc agaagcacta ggatgaaagg tgtcttctact gtgtagacca ggctagcctc
92101 gagttcagag atctgcctgc ctctgcctca gaagcactag gatgaaagggt gctctcactg
92161 tgtagaccag gctagcctca agttcagaga tctgcctgcc tctgcctcag aagcactagg
92221 atgaaagggt tcttctactgt ggagaccagg ctagcctcaa attcagagat ctgcctgcct
92281 ctgcctcaga agcactagga tgaaagttgt ctgtcaccac acccagtaag taattcttct
92341 tcatgggctg aatttcccaa tcacattgat ctcccatgac aggaagatat aaaaacagta
92401 aggtttatga attttaaaag gcatgtcttg ggatcaataa actcaaagaa aattaataga
92461 tctggtatga gcaaaactac aatttgggta ttaacataag ggtcagcgtt cttgtgtggg
92521 gaacagggcc ctccattgtg gaagggtaga gaatgggcaa taaaaactaa ggacttgggg
92581 gctcgagaga tggctcagca gtttaagagca ctgactgctc ttccaaagggt cctgagttca
92641 aatcacagca actacatggg ggctcacaac tatccataat gagatctgat gccctattct
92701 ggggtgtctg aagacagcta cagtgcactt acatataata aatcaatcaa tcaatcaatc
92761 aatcaatctt aaagaaacaa acaaaacaaac agacaaatgc ccaagcctca aaaactcact
92821 accacaaaaa accccataaa gaaaaaaaaca aacaaacaaa aatccaaaac catacatata
92881 aaaagaaacc ctaaaccaa aaaaaaaaaa aaaaaaacia caaaaaaacc caccttgttt
92941 ctattacctc tacagactaa gaatataatt cacttattta acaaatactt aggggcaagc
93001 aatccactat aaataaagag gacactttgt ctctgaagta aagaaaaact ttctttccct
93061 aaagatttac cagtaaagat taaaataata gtcttctgcc tatagtattt tacctcatga
93121 aactactagt agctcaacct agaagttcta gtggcaggaa ctgaagggca tctatctagg
93181 ggactttctc tgtcagtcga agactagaga agataagatt acagggtctt gctgccacca

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FIGURE 6LL

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93241 tgggagatgt tgttcatgaa tacaattctg aagcaacatc ccaggagcgc tgtctacacc
93301 aagtgaagaa agggagtctg caggctcaga ccacagcttg aggtgtggat ggcacatctt
93361 tctggctctg agaggtaaaa caggagatca ctctttaatc tttcctttgc tcagtctcct
93421 caacggaggc aagcaaccca aactctggcc ttacagaagt gtggactctg cagcagctag
93481 catgagccag ccatgggtct gagccatcag aggtgtgtgt gtgtgtgtgt gagagagagt
93541 gtgagagggt gagtgtgtgt atgtgtgtgt gtgtgagaga gagtgtgaga gtgtgtgtgt
93601 gtgtgagaga gtgtgagaga gagagagaga gagagagaga gagagagaga gagagagaga
93661 gagagagaga gagaacaggc ctttctgctg taagatgtga cttaaagaaa gacgagggct
93721 gatcctcttt acaggagtat attctgggct aatggctcaa acatcgactg tctttctatc
93781 tggattttat gtttccgaga aactcacagg ggaggcgtca cacaagggc ttacttacat
93841 cccgtgctgc ttttctaagc ctgtattctg cttgtgacta aaggagacaga gccaggaaga
93901 gcatcgacgc aagtaaacca agaagcggtc cagccactgg tctgggtggg tggagtactt
93961 actgcctctc cggatgttaa taagcagatt gcccttcagg atggtgcac cttggagcat
94021 ttgagcagaa gtcaccgaat cgtatggttt cgttttcttc tcttcacgc cgcagacttt
94081 ggggagggg ccttcgcagg ggatacagta catgctgggt aagataaaga gtggacaaa
94141 accacaaaag tgagttttat ttcttgcat aaaacaaa aacaaaaaag aaaacaaaac
94201 agaaaagtaa ggaggctttt tgtttgttat tacagcagca tttcatgaaa gaaccaggct
94261 gaaacatcca aacaatcaca cagtataatc tctacccag ggcaagccat ccaagctgca
94321 aacacacaga gggaacacag actgcagaag aggaaagcat gtcgcttgt ttagacaga
94381 atacacttcc catgcaagaa gcatgtgggt atcataggct tgtggctggg gagccagctg
94441 gtctacctgg gagacacaga ctcacaggca ctctggggct ctgaataaat ggagctgctc
94501 actgatgaga ccctcgctg cctgcatgcc agaggaggtt gggcaagctg gcagcgctgg
94561 ggaagggaca gccgcattct tgtactaac aggagtctaa ttcccaaagc ccaggagagag
94621 attccaacag gtacctggcg cagtgcaggt ccattatctt cttgctaaag cacaagtga
94681 tttatatctt gacagtgctt tgcagaaact tgtaaattga tccaaatgtt gttttgctgc
94741 acatacaata aaagccagga acctccgcag ctctctaatt aggtccttgt ccgaatgcta
94801 ccctcagtgc cacacacaa ctaggagccag aagcagtggc atgcttctct cttcctgccc
94861 atcatttagg aaacggcaga gaagatgcta agcctggggc tataccttct gagaccttag
94921 cctgtatata gaataagggc cgagaagctg ggtcgatttc tgaatgagaa aaatgacca
94981 atcttctgga atgggtggga cagtgttata ttcaaattac tgctcttaaa tgagtccgtg
95041 aaacctcacg aaaagaaaga aaatcagggt aaagcaagag ctgcctttac taaagtcttc
95101 catccgttcc caaaatacta tctatagtct gttttgttta aaaaccttaa tagttctctg
95161 ttatcttctt atttcttatt aggagagtgg ggctgagggt ttcacaggct cccatgggaa
95221 gtggacctag ctagccaaag tgggggacat ctggcttctt ataataccac atgcaacatg
95281 cttgtgggtg tggaacgaga atggcccat agactcatgc atttgaaggc tcagtcccta
95341 gctaacagaa ctgcttgga aggattagga ggcgtctggt gctgagctct cagttatttc
95401 cttcaactcca ccatctggga tcttgccctt tgaaatcaca agccaaatta gacatactc
95461 tgtatacgca gctaaggcca tgacatttta tcacagcact agagaagaaa ctaagacagc
95521 tctcatttct agcctggaga ggggtttcct tctgaacttt cttgtgctc tgtttgtgtt
95581 tttctcattt aactacatga cgcataaaac ccagctctct ctaaaaacaa acaaacaaac

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FIGURE 6MM

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95641 aaaaacatac ttggaataac tgcagcttca tacacagacc cgtgcagaca gtacagagca
95701 cccgtgtact ttccacccaa cgctcccaac tgctgctaca tccaacataa cgataacaca
95761 gtgacctggc acgcgtgtca ggttctgtgc atttctccat ctgtctacat agacctgtaa
95821 attccctact gcaatcgagt tgcaggacaa cttcaacaaa gtcctcctgt gtgttgccctg
95881 tttgtagctg ccctctgacc tgccccagac ttactatccc ctaactcccg gtaactgcca
95941 aggtgtcttc tactgccacc ttgggaaatg ttacagaaag gcagtcatat agcacatggc
96001 ttctgaggct gatgtgcttc ccaatgtaca acacccttga agttaaacct tcctttacct
96061 ctctgggtga tgttctgtgg ggaggcctgc tttcctactt attgtaccag atatctgagt
96121 tgtcctcact tctgggtatt acaaacaaag aggctacaga caagtacatg aaataaacgt
96181 tcagggtcaa catgactatg tttattcttt ccccatTTTT ttttatcca aataggaaaa
96241 cctggagcca cctcccgctt tgtaaaaatg tctaggaate atttagcaat tgaaaacatg
96301 tctataaggg tgtgttctga ttatagctta agtttcctaa aaccactctt tgtatagaca
96361 gagcacaac agtatttttca aaatactttc aagcaagtgc taaataggct tcaaaggcca
96421 gcagagggac agctattatt tcttgatagt attttaattt aaaatgggag agactgtgag
96481 aacgggcagg gagcagcagc ccagtgtctt aagagcacac tggagggaag gagaccaac
96541 tcctatgaag acacagcatc ctactgtgt gttacaggac agttgaatgc ctttcagtag
96601 ggagaggaaa taaacttgca ggtcaaatat gatatagtga gtttgatggc cagctctccc
96661 tctttttttt ttttaatttt tattaggtat tttcctcatt tacatttcca atgctatctc
96721 aaaagtcccc catacccacc cccccactcc cctattcacc cactccccct ttttggccct
96781 ggcgttcccc tgtactgggg catataaagt ttgcaagtcc aatgggcctc tctttccagt
96841 gatggccgac taggccatct tttgatacat atgcagctag agtcaagagc tccggggtag
96901 tggttagttc ataattgtgt tccacctata gggttgcaga ccccttaagc tcttgggta
96961 ttttctctag ctctccatt gggggccctg tgatccatcc aacagctgac tctgagcatc
97021 cacttctgtg tttgctaggg ccctggcata gtctcacaag agaccagctc tccctcttac
97081 cagccagctc tcccttggctg ctcccagccc cagaaggaag gcattgtctg gactgtgggt
97141 aagcaacttc aactgccag acaaaggctt ttggctcaag atgtagaggg gtacatacac
97201 cccttttcta tgctaaaagt gattatttag atgtaaaggg cctctaaagg cttatctagt
97261 aacagcttag tcaacagctc aacaaggtag ggtttactag aaggcctgtc tgtccttggc
97321 acatgccaaa agcaatggac ccaagagcta aaaccaacct ccccccctct cttcttcac
97381 ctctctctcc tctcttctct ctctctcata aactgatcac cctaagtatt ttgttacagt
97441 aaccgagagt tgactaacag agactgcaa cacatgaata aaaaaatggc agacttattt
97501 ttagtagact gtattataca attctgagtc attgtagtcc ctggcttacc aatcattta
97561 aaaatatttg atcttttctt ttttactgtg ataatgggtc agaaattaaa caggtaggaa
97621 tttacttttc atcttagtat tatgaaagaa aatgtaatct ttggtttgat ccagcagtca
97681 gcttacagtt agagacatct ccaaatacta tagcagcaat ggaatttctt tttgaagatg
97741 tactgaacat cttttataga gagtgactgt agcaaaacta tacattttat atacttacag
97801 aattgttagc aatgctggag actggacctt ggctcttcta tgtgccagag attggatcta
97861 ggaccttcta caaggtgggg actggatcca gggcatctca caagtgtggg cagtattcag
97921 aacttcctag ttgtattttc agaggctcag aaatgtgtat gtgtgtacag taccggaggg
97981 agggaaatgaa ttacaatgga accttcccc aaagtcctct gctctgttca ggggaggaaa

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FIGURE 6NN

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98041 caacaacctc agacctctga ctgtcctgtg tttccagagt tataaaatcc tgtcttcacg
98101 aacatcaccc atgacgagtt tgtggaagta cagcttggtc agtcagaaac agctctgctt
98161 ccacagtgaag gcctcagagt ccaggaaggga aaaccagagg ccacaaagat ggtggaaggc
98221 ttagagaaaag gaggttctgg cagaaaacat ggcagatcag actactagtt catgcccaga
98281 gccagagctt gcaatgagac atgggagacc tgtttccagg cctcatgaat gctggtgagg
98341 gttgtcttca ctctctctca gactgagagg caaagctttc actggcctag agtagcaagc
98401 tgggaaggag tatctgtagt taaagtctcc accgctcatg cttcagcttt gcagggtgcac
98461 ggggagcaag gctcgggagc acctggccag caagctaatt cttacgctct agtgctagca
98521 aggcaccctc aaagtttaga aataaaaaag caagctgaaa cagaccacc actccaagat
98581 tcgcattaaa acaagctcag ccataccctt gtacagacc catctgggtg aaccctggg
98641 aggtcctaca cttaggggct atgcagcaga gaacctcct gggcctaggg acaagagccg
98701 ctgacctctg ggtgctgttg cggatgaagc ctgagggaca ctctgcatg caetcatcgt
98761 cgtggataac gaagccatcc gactcactgc tctcagcgtt ggggatgttg gcgcagaaat
98821 cgcgatccac acagcgccag ccctcgaacc tgtagggtgc aggcgggcag gcaggcacac
98881 acacgccttt gtagtagtag tgtctgcagg ccacgcagggt tgtgttgctg tccggtgtgt
98941 ggcagctgcc caggcactcc ggggtggcagc actcgttggt ctcgggtgcag gctcgttcc
99001 cgcacacact tgggcacact gtgaggacag agggagagag ggtggtaagg atgatgggct
99061 acacagcctc ccctgggtca tccgctgcca ccaccagcgt ggcgtaccgg agactggcta
99121 gaaaagcaca cctcctctga aatctgcgta gatcttaccg tctgtgaatt ccactgggt
99181 aaagacacaa cccaacccaa gtccattctc tccttagac tcctggtttg ctatgggatg
99241 agccattaac atttaacacc ctggactct tcaaaatgca gtggccacac ccattaaaag
99301 ggagcccatg gtactggtga acagagagaa atacagacaa tatgggcctc taggactata
99361 caaggcactg tgctcctcag ctctccttct gtatgagaat tccattctaa gacccagtg
99421 gatgcctgaa ccacgcacag aacactggcc tgtgcacacc cccttctccc tcatgcatac
99481 aaagtgatga agagaggagg cataacaagt acgggtggtt gaaggagaaa tgtcctacac
99541 aggttcatgg atgtgaacac caggccggtg gtgggtggtct gtttgggaag gttacagagc
99601 ctttagcagg gagctggagg aagtcctttg ctgggggtag agtttgtttg gggttttaca
99661 gcctggccca cttctctatt tcctgtgtgt ggggtggaat cgatcacttt gtgttctctg
99721 cctgaacaaga ctaaagccat tccttcccc cttcccccg ccaccacaag gactctgtcc
99781 cctctaggac tgtacaccaa gataaacctc tatctctggc tccatttttc tgtcaaggta
99841 ttttatcaca gcaacaggaa agttccaaat aaaacaggga actagtcaaa acctctaggt
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99961 ttctcaaact ccagaaaaag aaatccaggc tacggaggga ctactctttg ccatgggcac
100021 agaagtaatt atggtctcta aagaggaaca agctacaatc gaagtgcaca gtgcttatag
100081 aaggtctttg gtaatgcccg catctgcaac gtctcttcac aacacaacct tcagatcaca
100141 agcaagctgc tggacggtac aggatggtag tacacagggt ttctgtacce aggggccacc
100201 tgctataagc cttgttaagt taaaggccag gtccagtaat cacagatcta aaatcacacc
100261 ctgaacagggt actctgctat gcacttctgt aaatatgtca tgatgaacac acgcctatga
100321 tccttacttg tgaacaacat ataaaacaaa caaacaacaa aacaacaaa caaatctggc
100381 taacagtaca tgtacccaat tgggggaagg gattgtttgg aaatactaca gaactacata

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FIGURE 600

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100441 aatatgtata ttttaactgt gatgtacca agagtcaaga ttccatgttt tattaataaaa
100501 aaaaaaaact actctaaaac caaaactaag ccaaataagc cccagtaacc acagggttaac
100561 ataaagaaca cacaagttca tctgcacca aaacagccgc tttgtcaacc cttcatgacg
100621 tgggtctttcc cgggttcttc ctgtgcacag gtgtatgact acacatacct gaatgttaaa
100681 ccttggacta cggagaaagc actggataga cttggagtgg ataccaccat acagcaatct
100741 cgctacgtct caccgttaca gctgtgcccc agcatcaaac gcgcctcca tgcccacaca
100801 ttactgttcc atgagtacgg ccattcttgt gggcacctct gcacgccact gggatcagtt
100861 ttcagaactg actgcacgga gtcagtatgt gctctggagc cttacaccag tctgtctaca
100921 cagctctaag tcacatccaa gaattcctgt gtcactgccc ttaaaaacag ttaaatcagc
100981 agcatgacct agtaaggaga cggagttct cgtgacactg ccaaactgac ataactcttg
101041 atttgactct aaagtcatcc ctccacagaa acatcggggc atttccctc cctggttatc
101101 tccccctgta ggagtcttag gtgttctgct ggggtatgctc tttggctcca aggcctccta
101161 gcctccactg tggctagagc gtggctgctc tgtgtttgaa gttcgttcat cccatgggct
101221 ataaagcaaa agttttacta gagcttctct gaacactcct ttaaaaatac agtgtgtgtc
101281 tccttttttc ttgctggctg aaacatagaa atgatgcaca gatattcacg cagccatctc
101341 agatggaaca tgaggcaaca tagtgagttc aacttggcct ctcaagatgg ctgggtgtctc
101401 tagaccagtg gttctcagcc tgtgggtcgt gatcctcttg aggggtgaca tatcagacac
101461 catgggtatc agatacgtac attatgattc ataattagta caaagttata attatgaagt
101521 agcaacaaaa taattttatg gttgggggtc ccacaacata aggaactgta ttaaatagtc
101581 acagcatgaa gaaggctgaa accactgctc tagactaaca ctgcagctgc tgaccttga
101641 acttcttcag gtgaagagaa accaactttt atctatgcaa ctgaaccatc cacacagaag
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101761 ttcattttat ataactagct tcaggctgtt tttggacacc cattctagct caggaacaag
101821 cagaagttaa ttatctctgg tcacacaaaa aaacaaaaca acaacaaaac aaaaaacata
101881 aaacaacaac aaaaacacca aaaaatcaaac caaacaacaa aaaacctgca ggagccccta
101941 atatcagaat tcagacactg tctaccacag caattacctc aaagacagta aaatggagtt
102001 cactgattta acagcctacc atgtttttag cttcacacac taccactgat tcttttttca
102061 ctcaaacaca tcaatatatg acacagttag agatgatagt ctgatgactt aattaaacat
102121 atgcactgca cgggttacat caaggtttgg ggtctaaatg agcactgaag ttatttgtgt
102181 taattttttt ttttttaaat ctgtcaatga cagaagtcaa cgatctgttg gcatttacgt
102241 acccaccag aatttactgg ataaacgctg cacctgtgtg ccaggcaact ggacatcctg
102301 tacaattgta cgggtggcagt ccctgacctc aaggaaagga taccacacca ggaagcagg
102361 aaagaccag cacagggtgt tcctagtact gtgggttcct ggaagggtct tcagagacag
102421 tgagattggc actgaaaaag gaaggccgat ggggaggggc atcaggacca cccgtcacag
102481 aggtcctcag atgtaaatac aggctgagat gttgctggaa acaaaaatgga ccagctcagg
102541 gaggtaccac aggcacaccg attgacggac agcaggaaat caccctgctt taggcaaggg
102601 ttaggttctc acactagaaa ggtcagcatg ctgtatagcg aaggcatgat aaccagagtg
102661 ggcagaaggg cagaagaaca gccagaggag aggaatctgc tactgattac actgtccatc
102721 tatggctcac acagatacat aaagttcaat gtaactcgt aaaggctccc tgggtgcagc
102781 gtcccagcca tccgccaaca ccattgctct gtgattcgtt agctcgacgt tatcagcaga

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FIGURE 6PP

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102841 gattatcaat gaggactaga tgccaacttt ggagcccttt acttacttac ataggaaaga
102901 aaatgatata tcacaataga tgatgaagtc aaatagctac atagtagtca aagcccatac
102961 catataaaag caggggggaaa taaccttgta cactgtcttg aatcagttac ccccaaagt
103021 caaatgctac atctttccag gatgagaaag agaaatagaa atccttgaca aaggatttgc
103081 taaatttgag acatgttgag ccctgttcca ggctgtgat gggaacttct tctcaactaa
103141 gaaccataaa gttaaaaaca ctgtctttac agatagaacg gttcttttaa ggcatatacc
103201 agatccatga gtcccttaac actcagtcat gccaactgtg aacaaatgag catctgatat
103261 tctgtgggtg gaagaggaca aaaaaggggt atgcagagag ggagagagaa gatggaggaa
103321 ggccgacctg cttgctaggg gactgactct agagatctgt gtgtggctac agggaggaaa
103381 ggggtgtggc tctctctcca gcacagagga ttccaggagg aagcaggaga acgcagggt
103441 gggattagac agtcctggag ccagcttcag aagcctgctg taaattttgt ctcattctga
103501 tgtatataaa tattattagt gttcaggact attaagggtt ttcttgaaaa gccccgggca
103561 gtgcgtctcg ccagcagatg gatggctgct ctccatgagt gccaaaactt aaaatttagt
103621 gcagtaacca aatttccaat tacagcacca tgggggggaaa ggaggggacc tcccccgcca
103681 ctccagagga ggggcacaca ggcattggtt aagggcagtc caaccttaaa aagaggaaac
103741 ggaagctgtg aactagggca cgaaggaaag caaattgatt ttgccatga gaccgttcta
103801 ttcccttgcca ttaatcagcg aagacaataa aaacaaaacc ttattgaaac agtcagaaaa
103861 gctacaacat gtcctgtgtc agccatcaga aggacaggtc cagggtcagc gtgcatacgg
103921 aggccacacg ttttaaaact cctcttcatt tctttaagag aggacaaaca agcctcgcac
103981 atcagcttgg tccttgcat tagtaagttc tttctaattt ccctttagcc cgtgattgct
104041 tctgtcagtg aatcctttca tgatcgaaag ctccgagaag cgagcaagct aaagcttccg
104101 agtccaacgt gggaagaaga agtaacgaga ccgcagaaga gaaggatgga agcattagac
104161 aaggcagtg aaacactgg tgggaacaca gaggccagtg aggggaaggg gaggtaacag
104221 gtgctctggg tgactgtcag agcccatggg gagtaagggt ccgaacatcg tattcaactg
104281 tagtccaaac tctagaacag agttaaaaag ccatttgcta tcagtcgta agtctctctg
104341 gcaagaatct tcatattatt tgaaacacca cacctaggat ttccatgggc tccccagtt
104401 cgaaactaag ccaacaagac ctgtcttcag gctctagtgg cctacctcca aaggaaactt
104461 tctcatttca ttaacccaac caagcactct atggaggagt gtgtggataa gccttgaaat
104521 agactcgtgg ctaatcttgg gagcatcctg ccagtagctt aaacatgcag aagcctcctc
104581 cgteectgcc ctctctctct tttctctctc tctctctctc cctgtttctc ctgctctgc
104641 tctctctctc gctctctctc ctctctctcc tctgtctctc cctctctctc ctctctctcc
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104821 tacattctac tttatgtgtg tgtgtatgta ccacttttac gtctgggtacc cagagggttag
104881 aagaggatgt cagatttctg ggaaactgga gttacagatg attgtgaaac attatgtttg
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105061 agcccaaggg cagagtatca ccaaggctgg ccattgcctc tgttttgtcc tcagggttaac
105121 cagcaaggag gatgctcatg atgctcccat gccttgctac ctttcaggaa aggcaaagat
105181 aggccaggga actcaggact cctcatagtt tggatggaag ttccagtttt caaagaatga

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FIGURE 6QQ

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105241 gtatctctgt tggcaggaac tgtgcctgac tgaggaggag caggggacca atggcaagaa
105301 caaggagaaa aagcccagct gggggctctgt gctgtgtcca ccttacaagc atcacaatgc
105361 tttcagttta ttagtcttca atgtaccct cactatctc tcttcacata cctttcccca
105421 ctccaatctc ctcatataaa ggtactacta tgacttcact gtacctctga aacaaaaatt
105481 acatgttgca atttgactat tgtcattatg gtgtgggtgg aagactaact aaatctaacc
105541 aaaccaaate taatctatgt tggaggtaag gcctttggga gagaattagg attgtatggg
105601 gtcactaggg tgggacatca ttgtggtagt agtgccttta tcttatatat agagagagac
105661 agagacagag acagacagag caagcaggca agctcagcaa gtcatgcctt ggccatgcca
105721 taatgcaata ggaatgccct ccttagagac tgacactaca tccttggtact tctctgtctc
105781 cagaactatg aaaaagtatt ttctttataa actaaccagc atcaggtaag ataagtatac
105841 ctcataagga atagatgggt agtgttgctt cttggactca gtcagtcact gggttacatc
105901 ctgacaaaat ctgtgggtca actcacaag tcaaaactaaa tagtgcttct ccccccgcc
105961 ccccccccc agggggagggt atcgagggtg ggagagtcag agacagagta agaattgagga
106021 gaaaggagaa tgctttctcc aaaaggaaga caaggaccta aaacatactt atgggtctttg
106081 caacgtcaaa aggagaactc tactgcctca ctactgagca agcatccaga gtttaaaaca
106141 gtgtctaacg atgtctgcct ggaagactgt agccactgca tagtctgtca cacagcaaaag
106201 gcaacttcac gtggcaaaaca gtgtcttaaa agcccaggcc gaaaaatcac atttggtaaaa
106261 gtattctctg cctaattgcca aaaaccaaac caaaccacac cataccaaac caatccgaac
106321 caaacgaaag caatctcctt ttgtggcggg gcggtaggca gatccagagg agacgtcatt
106381 ttaagccaga atccaaagct atttcagttt ctgtttgaac agaaaaggctg ttacagatgg
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106561 cctaactttt ccagcagctg atgtgttaag tcattttctc cttattgact ttcaaaggat
106621 tttcaactgc tctgggttag cttgcttcct aagaagagcc ctgaacagtg caccgcact
106681 tgggcagttt cttgattctt ggggagtata taaagggcta taagtcacat attgttgctc
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106801 gcatggtcca gtcacagacg gccagagtca caggcaggtc cccatcttaa ttccaaatac
106861 atctgcaaaa cccctagaca gtcttccaag cagcccaagg gaagcccact gtttgaggc
106921 ggtgcccctc aatgcggaga cagcactcat ttggatctgg tttcccagggt gacctccgg
106981 cagcattcac tcctcagggc tccatgaagg tctggcacat gcggggcaag gctgctctct
107041 cccacatgct tgcaacccta ttctaacagc acaggatcat ttgaatcagt gtggaatatg
107101 ctgagactga aagatgtggg ctgccacggc tagggtaact tgctcagact cagatctcaa
107161 aagtaaggac atgcccacac tctgcaggct cattctgagc ctctaatac tgagatctcc
107221 caggtcagcc tttccacaat agctgtctga gtctctctta tataaatcca atttatacca
107281 caaaggcaaa atacaaggct gcttattaat acggagttaa ctttcagtg tatttcccat
107341 atgcctgatg acactttagg tgtgttactt atatgcatta tttaatctc ctgataatca
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107461 aactcatgca agaggatcag gctgctgtgc cgttggtggg tgtcacactc agagtcccca
107521 acagatgaca gcagcctctc cacacatctt cccatcgtgg tgtggacggc ttctgagcct
107581 ctctgctgtc tgaaaggcat gctgcagggg agttgcttgc atgctagttt tctttttaag

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FIGURE 6RR



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107641 catgcaacca taaggaagaa ataaaccaa agccctacta cccttttcta ctctcttgag
107701 gtatatccct aaatctagag gacaaaacaa agtaacatac acaccgaaga gccccgcctc
107761 gtgcatacaa gtgatactag agaaataata tgtatcaact cagtgtcctc tattgagttg
107821 tagccaatgg aagtctcatg gacatttttc tgccacaaat ttaaaagact agattttttt
107881 tttttttcat gagacagggg ttctctgtat agccttggtt gttttggaac tcgatccaca
107941 gaccaggctg gccttgaact tagggatcca cctgcctcca ttttcagagt gttatgatta
108001 aagatgtgga ccaccctgcc tggccgccag gctggatctt gttggtatct ctaagagcca
108061 ctgcaaagtt gcacactaac agagaagctt ctcttctgaa agatgcacag tcaacatggc
108121 ttacctgata ggaaatgact gtgacatcag accaaccaga ccaacaagac ccaaaagact
108181 acaggctcct cagagtcagc tcggaccaaa taagtgcact gaatgcagta agcatgctta
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108421 tgtcgtggaa gaaaatctga gtcagggcca gttgagatgg ctgagtggtt agataaaaca
108481 gctatccttc tgatggcctg ttgcaccccc accccctca ccctggaagt cacatggagg
108541 agggacagaa tcaattccta ccaagtgttt tctgactgcc acatacatgc tgtggtgtag
108601 gtaggagtct cctcccccaa taatgtttct aagttgggga acagtccagt gcgtcctcct
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108961 tgaggaccga ggtgcagctg acccaaagag ggagagcagg aaatttcaat aaatgacaaa
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109081 gcacattttg taatatcagc tttaacaaaca cacacacaca cacacacaca cacacactta
109141 aaaaagcaga aagtctggtg gttttcagtg tcttcgtaga gttgtgcaaa tactgccaca
109201 atcgacgtta gaatattttc atcatcccaa agcaaaaagc ccatacatag caaagcttcc
109261 cccagctctg gggaatgact aatcttactc gtctccactt ctccactgaa tcgcctgcca
109321 ggagcatttt acttagtgga atcaaacaaa ggggtgttctc ctgtagccac tgtcttccat
109381 ttaaaacaat gctttcaata ttcacccttg gcatgggtgc tactagtcct tctggctttg
109441 ggctgtactg attctcactg tgggaaagcg agcctttcta ttaatgtgga gtgataacat
109501 cgtaggtatt gggagtagaa atgctagaaa cactgacaaa ctcggaaggg gtaaggatgt
109561 caaaggatgg tggatgctga ggtccaggca aggtgctgag aagggtctgt ttgcatccca
109621 gactctgtat ttttggttaa ctctatccac taacttgggc cattctttga tagacagggc
109681 tgtcacagtg ggcataatct gtagaggaat tgtcacctac agtgtggact gtgtctcccc
109741 tctgctcagc aagctacctg tgccacttat ggaaaaccaa gtgcacacac atgagcttga
109801 gctctgtaga aatgcctgac aaatggatgg ctgaagctgc aacactgaag ctctgctaag
109861 atggggagag agaaaaggaa gggcaggaga gagtcaatgg aaaagatggg gacgaagggt
109921 gcagctcaac cttagagtcc ttttaccagc actatattgt tctcacagac tgtcttaatt
109981 cccgtgtact tttaaatagt cgaaaacgcg attttcaacc tatttttaaaa cccacataca

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FIGURE 6SS

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110041 aatttgaaaa actgcaggca gattttaaca cagggggagaa aacaaacaaa gagagctggc
110101 atgggggtca ggacagacag ggccctcaag ctgatggggc atggtcagca ggggagggca
110161 gcttcatggc tgcttcaagg atggagaatc tctgtctcac aaaagtcaca cactttgtcc
110221 tcaagagttc tgaaaaaagg aaaagaagca agaagtccct gcagagggcc gactcccctg
110281 cagccgttct cagcaggctt gagcacataa agatcacttg tgactgcctg tcacagatgc
110341 tcaaatggac aggatgggga aaaaaaatac ctttcacaca cttaaaaatt actctaagtt
110401 atttttaaate tggaactggt tgtatattcc ttataagttt atgaaactca cacggtcgtt
110461 ccatgactaa ctgaagcgga attgagagag tagtctctat ttataacttc tctgcttggt
110521 cgtgcgtcca gccctatttc cattctctgg tactgtacgc agagttatgt gaagccgtgt
110581 gggctctgaa atgctactta cttcctaaca aggcaggcct gtgttccata ggggcaaatc
110641 agtgggagac ggggtgaggg gttgcaatga ccaagtgaag gccaggctca gggggaggt
110701 ctcaagcacc catcattgct caggcagatc ttttgctggt ggttttgttt gtttgcttta
110761 ttttatttat ttattttaaa gacagagttg ctttgtaaac cctggctgtc ctgggacttc
110821 ctctgtagac caggctagcc accctcaccc ggctagactg cacctctcta aacgggtgtt tgagcctgtt
110881 tgtttatacc accctcaccc ggctagactg cacctctcta aacgggtgtt tgagcctgtt
110941 ttgggacaat cgcacacctg gtgatggctg agagatctgt tctgatgggt tgaattcatc
111001 aatacacaca ttcccaggct agtgccttaa atctgtgtgc ccgctcatgt cacctcttcc
111061 acttgatttt agtgaattg tgtcaccaaa ggttgcaagg ctttaacagg tcatgcataa
111121 gctctctctc atacacaaat gtttatgtga agataactga aatgactgac cagagtcacc
111181 catgggacaa ctagtactca gagcagagca catgaggcct aggattaagt tctgttacga
111241 aaagcaagac ggttcatgga gagagtaata aatgtgaaag atacacgcgc acatagacta
111301 cccatggaat tcggatggct acatgtacat ggacacgaat cccctattca cagctgctcc
111361 catcaactgt aagaacagct gctctaaggc tgccctagtc tagtttgga gaaaaaatc
111421 aaaaccaact cctggaatct tctctaaaac aatgctctgg tgactgtagt tgtctcgtt
111481 catgctgctc caagaggagg aactccccat gaaaaggagg aaaaggcagt ccacagtcca
111541 cgcttctctt ttgggaaaga tcagaagggg taacaggcac ctcacacctc aatcctgtga
111601 ctaattatga aggtgggtta tttttactgc atagcctttt cttttccagt ttatatcacc
111661 tcttaatgtc tccagattca ttcctttcta gaatctttaa cttcattaca gccatctctt
111721 atgtccatgt atgaaataaa ttaccactaa aaacatccct gagaaacatg tctaaggcaa
111781 ctgagtcact gtatgcacac agtgaagttt acaggaacta ggaggactgt gacatcatta
111841 tagccccgac ctgaacagga tcaactgatg gactgaacct ccaggatgca cagctgcgtt
111901 taaatcagtc gcagttcttg aagaagcacg cactttctaa acacagcacg gatatcaaca
111961 gctgggtcaag tgaccttcag cctgctcctc tgaggccctt gcctctctgc tcaccacttc
112021 cttcatcctg ctgctctgct cctgtaactt ggctggaaac atgacttagg tattcccagg
112081 accatcctac tacatacttt tacttaccaa gtagcaatca ttaaaaaaaa aaaaaaagct
112141 cagctagacc tttaaattat ctaggagggt agaaaagcat tgtccctgat aattgtacat
112201 cctgaaaaat actatcacta gcataaatac atggaatatt cataatcagc ctatctcact
112261 gttaaaaagt acctagaaaa gagaccatgc aactggtgag ataccatttc tagaatctct
112321 ctctttttct gagtgtgcat gtgcgcacac acagacttct gttggcttc attgtacttt
112381 gcttgaattt tgtgagcaga gggggtggaa aaagggtacca acttggttaa aacgcacgcg

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FIGURE 6TT

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112441 aagtgttgat gccccatagt gccaatagga atccgagtat tctggaaatg atcactttctc
112501 agtttcaacc aggttttttc gttttgtttt taaaaatggg actgcccacc gttaaaaaagt
112561 tcaactgaagg cattcaaagt tcgagatgcc acgctctttt ttaaaaccat tttttaaaac
112621 gattaatagt tgagcactta ggtgggcagc ggtggcatgc acctacaatt gcagcacttg
112681 ggaggcagag gcaggtggat ctatgtgagc ttgaggccag cctagtctac agatcaagtt
112741 ccaggacaga ggtacataga gaaaaataaa caaacacaaa aataaaacca aaatcaaaac
112801 caccacaaca acaactacaa aattgggtcc agactgggag ccacctagg cacagtgggt
112861 agaacgcacg ccagctgact gaacagttcg gatgaagatg ccaacagaga gaggcccctt
112921 ctgttttttc caattaatta ggaactgtat gtctgtaaat ttttatttgg tctttgaact
112981 attatctcct gatctcagat aatctggttt actctaaggt gctgtccaaa tcatcaagtg
113041 ttccttgatt gctcagacct atccattatc acccttggat gtaagagact gaagcaatga
113101 gaagcatect ggacctctga agacgagggg gaacccaggg tatcctttca gatactgtgt
113161 acagggcacc tgcatagtcc tgtgatgtca cctgacccca cggggctggg agcaggggaag
113221 gtcatacaga gggagggaga tacaggtagc tttctgcttc ctcccggtt gaaccttttag
113281 cccagggtctc cttcatcac ctccagacat gttctggaat accctctagg ctgggtttct
113341 acggttcacg ggaattttca ttggaagctg aaggaattaa caggtagatt aactatctct
113401 ataaacctga accccagtaa gcagacagtg ccagcccgtg aagcatagat gagtctggaa
113461 cttggaatgg tgttcaagaa tcactttatc cgtgggtataa aaatgggaagc attcagaaat
113521 gggaaagggc caaactgcac tccgcctcct acaacgggac ctgtgacccc acagaagttt
113581 ggcaatgtca aggacacgcg aagtttagtt gctacacaaa gggactggtg cctatacagc
113641 gatgcctaag atacaggacc atattttcca aatcaactta aatgtgcagg tgtgtgtgtg
113701 cacatgtagt gcacgtggaa gacaaaaggg caatgcagta tgctttccac tattgtctc
113761 tgcctggtct tgtgaagcag gggctctcac tgaagcagga gcttactgac tggccaagct
113821 ggtaaccagc aggccttttc tgtttcctaa ggccacttag tttttacacg gatgccgggg
113881 atctgaactc agcttctcac acttgacaga ccactctctc attcctccaa atcaactttt
113941 aagcagagaa gccttaaagt ctgcgaactc ccaaactatc agagtcttcc tcttctaaga
114001 aagtatcccc aggtttttcca aattctggac tcagtctgaa agcgagggtc tgaaaaagcc
114061 agagtcactc cttccactcg ggggtgaggt ggaggtgggg gcaataagca ctgtagcaac
114121 ttccttgaca ttcatgtcaa aggagctgct gcctttcttc agaccccaga gtttctctcat
114181 ccagcaggag gaggcagggg ggtcaggggt cagaagccgt ggagcctgta tcctagtctg
114241 cagcgtatgt caaggtgtgc tttgtcccga tttagagaca gagcgagcgt tgaagtgaag
114301 aagggttaag aggatggaac aaacagaaca tactttgcag gcaatgacag tgacccaggt
114361 aaaggcagaa gctgtgctca actccctgta atgggagcca gacatgcaac ttctgttatg
114421 caatgctttg tgaaaagggg aaggcttttg gtggtctcca ctctcccacg ggggcctctc
114481 tcccacggcc taggaacgca ggagagagga ggaatggcca ccacaagtct gggctgcatt
114541 cctctgttct gcttctccat ggggcctggg agcgagcacc tttgcaagag aaaactcccc
114601 aagagctact ggattctgga gcaaaggcaa ctgaggaact atgaaccagc aggcaggaca
114661 tcttcaactg gcagatggag aaagtgaagt tcaagcaatc taagcgagga aggttgtagt
114721 gctcgtcac tcaactggag ggggttggg ggagcttgtt caagcttcca aggagtgaac
114781 acagggattg ggacaccaga aaagcagctt ttcttcatct ttgaaatcac aagcccttg

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FIGURE 6UU

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114841 aacacacgaa ccgcacacct tccttaaaga aatactgggg attttgaat caatttaagc
114901 acctctaatt tccaaccctg aaacgtttta ctactgcat tctctaactg cactcgtctc
114961 tcaccttgta aacaagcaag atcggctgga tgagtgtccc ctaattacgg tttccttggt
115021 gcccgtctat ccgcattggc agcacctgaa ctttctcctg cactgtatct tcctaaattg
115081 acattctcag ccacactgg cagcgtggcc tggtgccatt caacagcaca aatgacacat
115141 cccaagcctg atacttccgt cctcctgccc tctccacact gcggtgccgt aatcctgccc
115201 tccacccact cccaaccct ttgaaatttc taaacccag cagaggaagc cctgtagggc
115261 tcttaataag ctcatcatg ctcgaaatat ccgttttacc cacagggtat tgtaggcagc
115321 aattccgacc agagcacatc tcggcacgag atcatggcct ccaaagccca gcgttcagaa
115381 ctcttaagag caccgctctc atgcagtccc actggaacac ttgggaactt caaacagttt
115441 gggggtggga aaaaaacatc ctctctgata cttccacctt ccacctacac tgtgggttag
115501 gaaactcctt cctgttgctg tggccacgga gggtagatat cgeaactctc ctggtctag
115561 tgtttgtgaa acccacagga cacctacaca gaaagtccca tgccagagac
115621 aacgacgcat aaacatttta tgttaagtta gccacatgct aagaaaatat catcttgatc
115681 aggtattttt ctagttctgt ctcacgttca agtctcaagg ccacgtgga ggggagcacg
115741 gaagtacact ggttgcatat cttctgcccc actggaagat gcttgggatt tctgaagaaa
115801 ccacctgtaa atcagtctat cccttaggta atcgagaaag agagtccatg aattgtgttt
115861 cattgatgtg agtcctatag gtgcttcccc ttggacaagg ataggtacca agaaccat
115921 cctgggctgg ggagatggct cagtaggtaa agtgccctgt gttccacaaa cttagggcct
115981 gcgtttgggt tcctagcagc caaataaagc acaggacttg gcaacaggac cctgggatct
116041 ccctggctag acgcccctgt tgaaatagca acctctgggt tcagggagat gttgtagtaa
116101 agataatagt gataatcaag gtggagatgg cttagaggat atggtcgaca cccaccgtca
116161 actgtggcct tcacctgtgc acatgcacac acaggcagca agtgcacccc atatactaca
116221 cacacaggca gaaagtgcac cccatatact acacatacag gcagaaagcg caccatata
116281 actacacaca taggcagcaa gtgcacccca tatactacac acacaggcag caagcgcacc
116341 ccatatacta cacacacagg cagcaagcac accccatata ctacacacat aggcagcaag
116401 cgcacccaca tatacatata cacagttttt gaaaaaaaaa aaaaagctca aatcaattta
116461 taaaacatta agttttaagt tggcccttaa ctcactaata ttatttgaga ggatcatcag
116521 tgaaattaga aacagaaaga atttaattgg aacctgttga tgtgtttcag gttattcaat
116581 aacaaaaaca atctgccagc ccggtaacat ggtcatttgc tttgaatggg attgcttcat
116641 tctgtggatc cacattccct gaggtgggac tgaatggct aggtctcatc tctgggaaga
116701 gggacacaat ggcacggggt agcattcctc tgcacattaa tcatgcaaaa tatcattaaa
116761 aaacaaaaaa aaacaaaaaa ccaaaccta ccagcccgga agccatgggt gcagcagtta
116821 aagcaacaac ttaagaacag acgaggccca tctgcatgcc gctgtggcca catttgaaaa
116881 ggcccaagga atgtctgtct gtctgtcttc tctgcctaca gttttcaaaa ttggtttcgg
116941 ggagagttag gttcatgtc tgtgttagaa acatattacc gagcagctgt ctggttacag
117001 aagaacacgg gcttgggaga agttcacagt ccagccctgt cagctgctgt aagtcaaagg
117061 gactctgcct cctcagagtt ccaccggagg cagatgacag acaccacccc gcactgttag
117121 cccatgaaca cagcagcaa ggcacacagc gacagcaagt gtctcctgca catcggcagt
117181 gctctgtcaa tatcagctgc tgtctccacg taagtctctg gactggattc tcaccttggc

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FIGURE 6VV

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117241 tttgccaact atgtaacagt gcaactaact ggtgcacagg tatagaagag atgaggaggc
117301 tcctaggacc ttccgccacg gcacgcttgg aaaaggaacg tgacgaagag cttctagtta
117361 gttcccttca tgtgctgaag agctgcagat ctggtttcat ggaaggatgg ttagatgaat
117421 aagaaagaaa aagagaacta aagaatgttt tcaattttta aaattatgtg aaattgtgtg
117481 tgtgtgctg tgtgtgtgtg tgtgtgtatg catgtgtgca caggccaagg tgtacacatg
117541 aagggcagag gtgtgtgtga gagtatgtgt gtgtgtgtgt gtgtgtgtgt gtgcacaggc
117601 catggtatac cagtgaagg cagagggtaa gtgtgggagt cactttctct agcctttacc
117661 tgctaagcct cttactggcc cgtaagggca ggaatctgaa gtacttaaac ctcactctg
117721 atcaaataaa actttttataa actttaaaag accgttttct taatttcagt actcttctca
117781 gacccttctg tcctagagta acctctgtgt gatccacaat agacctgggc tcaccagaa
117841 ctccctgaag gttcaatggg gatggtgggt tggttttgtg cagttctagg aatgtacaga
117901 gacacaggct gaccaetgag gtcatgtggg gattaacact tcatcaggta caggagctgt
117961 agctcagggg cagtgtgctt gcctagcatg cttgcagccc tggttccaac cccaggaac
118021 gctaaaacag agaaaacacg taaataacat gtctgccagg tagcaagcta ttccaagaca
118081 aggaaggaga cttctgtgtt tcgaaaaatc tgttttgaaa cacaagaga gactgggact
118141 gtggctcagt tagtgtagt cttatctcta tccgagaagt cctgggttca attcccagca
118201 ccgttttaaat ggggcatggg aatagaggcc tctaattcca gtccctggag atagtggcag
118261 ggggactcca agttcaaagt tactcctggc tatatagtga agaatgcaag gcagactaga
118321 ctgggctaca tgagactctg ttttaaaaaa ggaggaagaa tccttccaat acataacttt
118381 actcaacttt gcttcagctt acattataaa cgctgggtgt agcatagata cagaagctct
118441 ttcctgtgtg gtgatgaatc attactcaca accaaaccaa gtgaggaagc agggccctt
118501 aatattaatt acgggattca gacagaggta gttagagaac tgtataatgg taacacccaa
118561 aactgggttg agtaccceaa atactcaaaa gaaacagaca atgctaacct gggagattag
118621 aaatgattct gcaactagtt ccctgctgca tgtgcagctg gaggccccc caagttggag
118681 gcttgggtgg agactgagaa agcatttgct attcgttttc taggtccaag gcatttcttc
118741 caggatccat gggctggact agatggagca agtgcaggct taagaagcac aggtactgtc
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118861 atccagttct ccttccattt gtaccactac tatctaggac tccactgatc tcagtcacag
118921 gaaaagggtc tctatagcca gtggccagag atagcctttt atgcttgctg cagcacacag
118981 tcagggcagt attccaggaa tgcacagaca gcctgctcag cttctctcac ttcccctctc
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119161 ccaacagata atgtgtggct acatggaggt aggcattggga aggggcaaat acacacacac
119221 acatatgcac acacacaaac ggaacacata catagacacg cacacacaca taaacacaaa
119281 catgcacaaa ggctcacaca cacacatata cactcacaca cataaacaca aacacacacg
119341 tgctcacata tacacacaca tgcatgtaca cacactcatg catacacaaa cacacataaa
119401 cacacacata tataccctac ttctgtacat gtgtagtctt gactcaggac cttgggacct
119461 gctgctcatt cagcatatgc cgctttctgt tctccacaga catcctgcag atgtcccagt
119521 gacctgcctg ccgctgcct tccctgtctt tgaggtgggt acaactctg ccaccccaac
119581 attttatgtc acagcttctt cttcagctga cttgaaagct ttattttgtt caaggtctac

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FIGURE 6WW

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119641 cgagcaacca agaaagaaga gctagtgttt cacgggtaca ggggtggagtg ttctggggat
119701 aggtcagtca tcgtttccct tttagggaga cttggatcgg tgttaatgaa ctactcacag
119761 gaactggcca gaatcagagc ccttgaatth tatgcactgg tccagggagg tcctgagaga
119821 gtggatgcag agtgcactgc cttttttctg cctttgcttg gaatcccaga ggagccagat
119881 tccaggaagg aagtggggca gggaggcagc aggggtataac gaacaaacag aaaaacaaaa
119941 caacaacaac aacaacaaca accaccctca aacctggtct ggctcagcgg gtaagagcac
120001 tgactgcttt tctgaaagcc ccaagttcaa atcccagcaa ccacatgggtg gcttacaacc
120061 acccataatg agatccgatg ccctcttctg gtgcttctga agtcagctac agtgactca
120121 gtataataat aaataagtct ctggggccaga gcaagcagag ttcctaaaat tcaattccca
120181 acaaccacat gaaggttcac aaccatcagt aaatccatcc atccatccat ccatccatcc
120241 atccatccat ccatccatcc atccatccat cttccaaaaa aaaaaaaaag ccaaaaccaa
120301 aggcattggc aeagaaacaa tgtgtgccta ttgctattag taacaaggta cettcttcca
120361 tttgggctgt gtgcggcttc atggtagttt accctgtgct gcctgtgttc atttccacag
120421 ggaccccagg atggcaggaa gacctgcagc cttctcacct tcagaaccag agccaagaac
120481 acagagcaaa tgtcatgaat ggtcagagtc acacagcctg caggaggcaa agctggaatt
120541 ctaagtggct gagccttgag gtctcaaagt ttgtgaccaa tacactgtgg tggacctgcc
120601 cgggttccag agtcactgga aatatcttca tagcaagcag gaagatctca gggacagcag
120661 acgtagttct aaatgggcat gtcttgctag aaggcacagc tgatgtgcct tttccagtaa
120721 gcattacaag aagcccatth aagcccatth aagcccatth aagcccatth aagcccatth
120781 gatgataaag aggacaacaa tttgccttta aaaaaaaat ggaagctggg cacagtagca
120841 ctcttctgta gtctcagaac ttaagatggc acactcaag accttgttc agatccaca cgtaagcaaa
120901 tcaaaggctg gcaggggaaa acacactcaag gcttaggaca tctaaatact caattatttc
120961 ccagaagggtg gtggcaaac agtgtaattc gtacaaactg gtagagcaca gaagcagaag aactataaac
121021 tacttcaaac agtgtaattc gtacaaactg gtagagcaca gaagcagaag aactataaac
121081 acaggattta ataattggata tgtgcacaca catatacact gttgaagagc ttgtcgtctg
121141 aaagtttcta tgaattaaat atttgttcat taactactcg agttcacttg caaggcatgc
121201 caggcgccaa gggagagcac agaagtgcac aaggccttcc acacaaagac caggaaagga
121261 gatgtgcaca tagataatga gtaaggcaca gacttatgtc ataaagatgc gtatcaggaa
121321 gccaaagagca ctgccagcca agacctggc gtggaaaggc atgtgtaaag cagggtgctcc
121381 cggcagggtc catgtatgca tgagaatctg ctggagtgat ggtgggggtg ggcccttag
121441 atccatgcat ttcaaggga aactatcaat tatcatcttt atttatttat tttatgcatg
121501 tgagtacact gtcactcttc agacacacta gaagggggca tcagattccc actacaaatg
121561 gctgtgagcc accatgtgggt tgctgggaat tgaactcagg acctctggaa gagcagtcag
121621 tgcttttaac cactgagcca tctctccagc ctaattatca tctttactga taactaaaat
121681 gccttaaaag tttaacttag taatactctg tttaaaagg atataactaa acacagccaa
121741 tctgttttaa acaacacagt ttctgaggtt gactagaaga tgctagttht tcattctggt
121801 tctcctggta caagaagatt tcaaactatc tacaatccct catttaaatt taaaaccaa
121861 ccaaccaacc aaccaaccaa cctccattgt gagaggtgcc atggcactgg tacctgcctc
121921 ctgctcctcc tattacaagg aaggatggct taatggcctt gctgggctgg gcttctctgac
121981 tgcctaacag tgtggaaggc tgcacaggca gtggagggaa aaaaccccca aacctctgct

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FIGURE 6XX

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122041 gtttggttaaa acaaacgagc attttcacat tcactcatac tccctgaccc catagatcct
122101 gtgaattcta aaaaggacca tgcttgatga gaatgttttt taaacattaa cgctacaag
122161 gtggagagcc agaagaaggg agccaagagt ggatggcgac cctcttcctc tcatgcttag
122221 caatttctgg tttcactcct atgcttctga gcacccaac aggaaggctt cacagctcct
122281 gaaggctctga gctagaccag ggtacacatg aatatgctga ttatgtgggtg ctcatgcaag
122341 gagacccta aaagatgact tccccaccta agtccgaacc gccatgactc tgagataatt
122401 tacccaaagt tacatttctg tttcccaaag tattaacaag agtgtttggc tcttttaaaa
122461 agaagcttag tctttcaggg cttttttttt ttcccttttc ttttttcatt ttcaacaaat
122521 tgcttctatc gtctgagatc tccattacgg aactgtttgt attgagtttt agtgaaggaa
122581 gaaaaaaaaa aaaaaaagaa aacagagcgg ctgggaagat tcaagtgtgc tggagactta
122641 acattagatg cgggcacacc ccaggcttca ggggttaagtt aaggagggtg cttgtgtcca
122701 gtgtgagagg tggggatggg gatagaggaa gcttctctcg aagacttgac cactccccct
122761 cttttgtgaa gcctggaccc ctgtcacagc gagtaccaga gtacagcact caccatgag
122821 cctcaattcc atgtgagcct attccttact ccacgttagt ctgcctcttt tgcaagcaca
122881 ctctgcaact tttcatttta aactgtgtgg tgtgctaacg agagtcagca gctctctgag
122941 tgacctaggc aagttctttc ttccatgagc tgcctccagc aacagagaaa gggggcaata
123001 ctgttgagg gtcacggcag ttgggaacac ttttctata gttccagaat tactgggtctc
123061 ctacccaaac ctcagatcat cattaagaca tgctaattgt tagcgagaca ggttgggaagg
123121 atctttttct atataaaata ctgctgactg gggcggtgaa cccctgtcct attgggtgct
123181 gtggccatgc aaaaagaggg tcttccaaaa atttaggatt aagagggcat ggtgggagag
123241 gaacaacaaa ctttggaagc cttctcaatg tactgtagaa ttaaaagcca accaaggcaa
123301 ggaagggtgc ttccaaccta gaaatccagc caccctctgc aacgagccca ggcctgctgg
123361 agaccacgtg aggtggtagt ggggatgcct ggaacctaac ataccacttc tagtaccgcc
123421 cagctggcac ccaatcagga gcggcacagc attctctaag cccagggttg cacctgcaat
123481 catcttaagc atacaatggc attgatttcc acttaggggtg tagaaataac actcagaaat
123541 tttacctatc tctgctgttt tgctgcaaaa tttcaaatac tctccaagaa acgcaaacac
123601 aacagaacac ggaggatgtg acacacaaat tctgcacaa ctcactgcca atacctgat
123661 gttatactca gtgtattaaa tggaatcaga atcctgagtc ccactgtcaa acttctcct
123721 cgtctagtcg gtatgtgtga ctgacagctg atgtcactga atgcttgatg tctgaaatgc
123781 ctaggattcc tttttctccc cccatccaaa tataacagct ccatttcata ctccctagaa
123841 tttcatttgt gactggttag cacactatca gtgagggaa acgggggctg caggaagctc
123901 accgtcctta cagatttctg ggaggagct caagagtaag taagtgtgta agccttcata
123961 gctctaccaa acacatgcat aaaacctgat taaacacaga ggaagaacat aaatattctc
124021 agtcttctaa ggggcagatg aagtctgggt aagaaggact aaagaaaaag catagagtaa
124081 aattcgctcc cgctttttta taactcttta agataaggag agttgtttta tgttttcaaa
124141 ataggcagag agagagagag cgagctagag agagaaagta tgtggtatag tttatgtgtg
124201 tatgtgatgt gatttatgtg tgtgtgagtg tgtgtatgtg gtatggttta tatgtgtgtg
124261 tgtgtgtgtg tgtgtagcac tgtgacagag tgtgtgcttg gcatgtgaaa tcccctgggt
124321 tcaatccttc cccttcagaa tgtttccttt ggaacaaacc aatacatctg gtgacgctga
124381 ccttttagtgc ccctctcca ctcacctgt tttctacagc aaaagtatct acaaaaagga

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FIGURE 6YY

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124441 agccgtgcct caggaagtct tcaccaaagc ttgaagagca tggagagaag aagtaaggtt
124501 ccatcagatg ccttgtgttg aggtaagtcc tccctcccaa tcaaccaca atgaatatct
124561 tctgatgtca gcccctctct ctgagcatcc tgtctctgag accttggaag taagacttct
124621 gtgtctggga ccaaaactac tggggctatt ttggcagctg agccctctgc ctctctgca
124681 gggaaaaaca gtaggaacat ttcaataaac attcatattt gagatatatt ctggctctgc
124741 gtatttttct acttcatagc acgtgtaatt gtctccctg ataaaagtgg acctagcaet
124801 gctattttta aagttttgtg ttctacactt taaaaggata cacaaagtcc tagcaggaga
124861 acgtcaatta ccaagtacaa aaacaaaaca aaacaaaaat aggaaatcac catttgcca
124921 atgccacagc aatgggtgtt gaatgaggag gggaagaaat aatgaacagt gtgttagag
124981 agtcccgaga tctgtctcaa agtacttctt aattagagat aaaaataaag atgttaagt
125041 acgagaggac cttgcagaga cagcattaac caagtgtcac aattacctaa gcatggggca
125101 tcaggtgccc tggcaggctg acgtactgac tcttcacagc aggaaagagc acaggaggct
125161 gtgtgtgggg ctgcaaggaa tgacctccca tgaagtacct ggatcgagct actgaagtgt
125221 gggaaaagtg tcccggaaat ggagaaatca aggaggacag gaatcagagc tgggtgggca
125281 ccgctcctgg atcaggaacc acaaatggca caagagaggt caaagggcac tgggaagaag
125341 gggcagatgg tggcagtaca gtgcaggctg taccttcatg gtccggacag cttcatcggt
125401 gttttgtaag atgctaatta gaagtgtc gacacctccc acccccacgt gtgcaaaact
125461 gaagcagaaa tatttcatat aaaacaaagt gttttttttt taagttccta aggtaaataa
125521 aagcaactta gtgacatatg gaacacaatg tccccgacag ttgacaata aggcaacact
125581 cttccttcgg gaggagagaa atctctactt tgcgtagga cacatcaagg atatgcttct
125641 ttggaaggtc ttcaggctgg cagagctggt accctccagt gcaacggaag tggagggtag
125701 gttctcaciaa ttccccatct catgaagaga aagccgttaa cgagatgctc aacgagaata taaccatctg
125761 actgagtgtt cccgcatgtc ccatgccctt ttcctaggct gcaagcacgc aagtgtaca
125821 tgcacttgt cccaggcaaa acatccatac aaactaaaca cacacacaca caccctttt
125881 cagatacaca gagtccttgt ttatgggagc agacattgtt ctgtcttctg tcacagatag
125941 gggtcctttg gcttggaag tttacatga gattgatccc actctttcca agggggagag
126001 catcctctga gtgtaagcag acagctccca gtatcacaag ccttagtttc ctcactatc
126061 ggagactaat ggtagtggg gcagtaaaaa gaccttgfca agctttgact agaacaacct
126121 actatgtggt attctgggag tagccttaaa tgtaactata ttcactggca aagaagaaca
126181 gagattcttc ccaggtgaat gtaagaaggc taccattttt acttcggtga tgetgagtgt
126241 aactaaggcc atagcacaac agaggagtac tccaccgcaa agggatgcac tgtctctttg
126301 taaggcgtgt gcccctcca ggtaatgaga cagaaaggag tggatacagc tgggtccagg
126361 gagtcgaggt ctccgagagc tatgctaagt cctctgaatc aatggtatga cacaagtttg
126421 tcttggctgg agctgggtgc ttacttcatc accagtgtc atctctaact cccgagctca
126481 ttctctgttg ctgcaggatt ggagagatgg ctcagcggat aagagcactg actgctctcc
126541 agaaatcctt gagttgaaat ggctcacaaa ccatccctaa tgagatccga tgccctcttc
126601 cacaggctct gagtgaaat acatgtactt acatataata aataaataca tctttgggtt
126661 tggggtgtct gggctgggga gagagacgaa aaagtgtctg aagatagcta tagtgtactt
126721 ggagcgaacg gggctgggga gggagacgaa aacccttctg cacagccttc tgaatagctg
126781 atatagaat aaataaatta aaaaaaaga

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FIGURE 6ZZ



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126841 ggggtttcagg cttgagcccc ctttagagac aggcagcaga gacacaaagg cctgccccaac
126901 atgtgtagga ttagatagcc tgggtatggc tgaaggggaa aggtactcag gttggccag
126961 gccaggagcc agactctagt atattatgca aggttgctc ctaaattata atgcacttca
127021 tttgcagaga gtccaacact agactcatgg tgtctggtag cccagagggg aacaggctgt
127081 gttcttcaca gggaacatct gaggacagag acggaccaag agggctcttg acggtggtg
127141 gtggtaagga ctaggagcgc ttacggcgag ctgcttgga gaagcctttt cagggtggtta
127201 tctgagagaa ggcacaggaa gtcatgaaat taggacctga ggacttgctc aggataggcg
127261 cagtagtgag aactgcatcc ttgtgaagat gggtttgacc tctgctggag gctacaatgc
127321 agctaaatgt gtctttatct taatgactcc agaaacgcca tgctgtgaaa gaagcaggta
127381 ggtagaggga ggtcaggaga gcaaaccaac ctcacgtgaa gggtaactca cagacttgct
127441 gttcactttc cagaacccaa ccctcaaaag aacatacttc tagggtgtag ctgggaacca
127501 ggaagcagcc agctetgagc tgctgcttgc ctccaagcaa ttgctctctc acacagtggg aacaageaat
127561 gctcatctct tttcaaagca tctgggggtg agtctattaa acagaaaagg aggcataaaa atgataaacc
127621 agacttctct tactgggtg agtctattaa actgtcagca gagagcgaac tgcttctctc
127681 cagaccgtca gaacacagt agtgcagaa actgtcagca gagagcgaac tgcttctctc
127741 tcacgccgga gggcactgct ggattaagca taatacaagt tatgtatgct cgctgatgtt
127801 cctgagcggg taagaaataa ccagtgttca ctagagtaaa aagtgcagcg gttctgaatg
127861 catgctggaa agatctccag caagggacag tgcaggaaaa cgggagcaga agtctcagcc
127921 ctgggtctgt gtatcacctg gtcacgcttt ctcactgagg gatattgggc cccgggcatg
127981 agaggagagg ttctgtctac ctagtgaact tctcaagact gacttaccac taactgtct
128041 cctatagtgt caggagcttg agtctgaaac agtcttctact aaatttttgg ctgtaactga
128101 aactggacta agtaattaaa aagggttcaa tatttaagct cacatttaag ttgggaatgg
128161 agggatggtt tgatagtga gagcactggc tgctcttcca gaggaccag gctcaattcc
128221 tatcacacat ggaggcttag aagcatcttc ttcaggagaa gacctacagg ggaactaata
128281 tccttttcta gtgcacacat ttaaaactga ggcttagttt aaacctgtt ttaccagggg
128341 caggggtgtc tgtgcacaag aaagacagac agagtttagt tttagttcta gacttctatt
128401 tgctcaccag gaaaataaca ttggtagact ttacaaaaat ctgcagcaaa aactaaatga
128461 taaatgtact ctcaaaacag ggctcaatat cccacagggtg atcagggtca acttttccag
128521 ggaccctggg gtcagtgggt tttatacttg gaatgagaac acagttaaagc tgggactgcc
128581 aatattcctg ctaggactct ttattttctt tatggcttcc cctagcttat ttagaagaca
128641 ggcttctgtc cctcagggac tggacttctc aagagcagaa cactgctgta ggaaacagtg
128701 tcttccaaga gtcaaggga ggaggaatgc caccactgag aggagatggc ttgctttcct
128761 ccctcaagaa aagagtgagc aaggctccat ccacggcgtg ttccaacacc ttccacata
128821 gctggaccca gatgtcatag gggacttgca gaaaggaagt ttcaacatca gctagccttg
128881 gcagatgtc ccaagtctgt caaaaataaa actcgggcga tgacggtaaa gatgggatga
128941 cggcttaaga tggagcaaga ggctttcccc gtggcgggcc tcagcttagt gctatgcccg
129001 cttgccgtct tgttcaggaa caaacggggg cccagatgag aaacgcgtc gcgttgacca
129061 tccagaaagg cagagtgtgt gcttctgaag gcagtgttct ccagccttcc taccttccat
129121 taaatggttg agtctgtcct tgtgtggatt gatgttattt ctaaagcaca caattcattt
129181 caagagggga gaggcaggat taagctggaa atagtttttt ttctattgag aaaaaattaa

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FIGURE 6AAA

129241 gtgtaagtgg aaacgttttc atgaaaatgt ttttatatct caacgtttcc tgcgagcact  
 129301 ctgatcccaa tatatcacag gactgagctg gatgagggag aatgaaggca aaatgaattt  
 129361 aaataaaaatt gaaactgacc ggctaggctt tattctccaa atctcatgaa atagcaaagc  
 129421 tgaggggggac agagccacaa ataaaccaa agaaaaaaa aaccaacaa aaaaaaaaa  
 129481 aaaaaaacia gaagcaactc aacgctttca gctcaaatga gtttcaattt ttttcaaaa  
 129541 tgttttaaaa tctagtttat tttcatagcc acaaaagctt ttgaatacct atgaatcaaa  
 129601 agccatttgg cagaaccatg gagcttgtcc tagttgcttt ctctcaaact cttccctggg  
 129661 cctgttaacc ccttgtagt cagtcacgca caggcaggta ctctcagtag ccagttctta  
 129721 ggggcactct acagccttag tgtgtatgag caggcagagg ctctaggctg gacggcacat  
 129781 ttttaaaata cacattttta agtgtatgta tttttttta ttagtcttaa ataggatagg  
 129841 gaaaatgata tatacagact ttaactacta attactttag acaaagaaca aacagaaaac  
 129901 aaaaaacaaa aacaaccccc tceccaaacc caaaccaaaa aaaccactaa aaaacaaaac  
 129961 aaaaaaacc ccaatccacat ccttttagaga ttattttgtt aatctgcac ttagctctgtg  
 130021 ctgctcaggg gccacaggag gccacaggag gcctctgaaa cttgaaacag ttaagattaa  
 130081 gtaaaaagt caacgaagag agctcaccac atcctaaatg tttctcaact actcaactcc  
 130141 cggctaccac acgcagggca gacacagggg atctgtcag gcacaagact acagagtaac  
 130201 agtgcaggtc agacagaaga gcaggggtgt ggtctcagtc cagctctcac atagctcatg  
 130261 ctggcctcaa tttcgccatg tctctgaaga tggccttgaa ctgatcttcc ggctcccttt  
 130321 gggactgcca ggtgtgtgtt actctacaca ggttacgtaa ttgtcaggcc tttgtgtttg  
 130381 tgtgcatttc cctaagcaac ttcattgtaca aagctaagtt gggtagcat tctctcccca  
 130441 ggcctggccc ctactctct accgtaaaat gcttcttccc taacaaccgg acttgagtgg  
 130501 ggtccctacg tacagagaaa ggagatattt acagaagaaa gggcaaatga ctgcttttac  
 130561 agggaaaag catcccaggt caacacacgt accagattgt agagagggca ggtgtctcca  
 130621 tccccgtgcc tctctatttc ctttccaaca ctcagccctg tgtgagcaga gagtaaggcc  
 130681 cctctttgat gctgcacccc cctattataa gcacaatgct tgtaaccaaa cagatgggtg  
 130741 gatgtttggg aaatgactga atgaaacaaa agaagaatgg ttagagagcc tctttatatt  
 130801 aacatccctc tagagcctgg acacacgtct ttaaatgcaa tctcagagca acccagaaga ctgattcagg  
 130861 ggatagcaac ctctttactt tcaaatgcaa tctcagagca acccagaaga ctgattcagg  
 130921 tagtatacca cagctcagtc tcttccatgc tcaacaatgg ctcttccaa atggcattag  
 130981 cgttgtctac atatctgtac agtcagagct aatgtctatc tgttcgtctt taaatggccc  
 131041 agagcttttc actttccata tactatttca cctacccttc acctggatat tgtctataca  
 131101 ataaagagga ggaaaccaag gcttggggca aactgacttg ccagatcaca tagagttata  
 131161 ggtatataaa tggaaaagct ctggtaaaga ttacagacta tgctgattct attagctggc  
 131221 tgtaggacag ctgaatggat ctctttcaag gaagggcatg atttgtaage atcccacag  
 131281 tcagtgtcga gtaaggctcc taagtcctgc tggcttgctg ccagccagta gacccttcc  
 131341 aggggtgagg aactgggcag agctcagcac aaccagctc acctaaactg ggctgtcaga  
 131401 atcattggat cctgcccac atacatccac tctgtggcca tatcccgag cttcacaagc  
 131461 ttcacagagg tcgggcctgt gtctgcacaaa agaccagctt gagaagacca ggaggtgtat  
 131521 atcaagtacc actcgttcat tcgttcgttc attcactagt cagaacttca aaccaataac  
 131581 cccagaagta aagacaaaaa ctccctctgc cctctgggtg cttgaacttc cctcttggac

FIGURE 6BBB

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131641 ccaattccca caggttaggg tttccagaag ctttcaaaaa aaaatcactg atgaaacact
131701 agctcttttag cttagcgtat tatacaaaaag gctgatttcc gatttatcaa agggttacca
131761 aataggaagt ataaaaaccg tatgatcctt acaggggaatg gtcaaagagc agtgatcaag
131821 tccctgattt acataattct cagccattct tttggcagac ctctacagcc actaacattt
131881 ccatctacgg atgataaaaa gataactctt ccccttcctt ggggtgcctgt cagggtataaa
131941 cttgaagccg ggcacagtta atcctcacia ctccccaagg aagaggtatt accatgtttg
132001 ctccagatta agaaagaagg gtcaggcctg aattccaggc atcagaattc tactgagagg
132061 gaagagagac agacagacag ctttcactct ggcctagagt gcagagaaaa ctactacttt
132121 ctgtgggaag aaaagtcagt caaccacagg aatcacagaa ggatccatca caagaggacg
132181 ccaactgtccc ttaagcagag acaggactga gaagaacaaa ggtactactg ggacagaata
132241 tggagagggtc agcttgagga agtgctctag caaatggcat caaggaggcc atttcccaaa
132301 ctggagagag acctcagatc ctgaaccacag gagccaggta gcactgtggt acgcacacat
132361 tactgatgtg gtgggagaca caggcagagg tggcaggggtg aaatcagggtc
132421 aagaagaact gagagccagg ccggggccac tgctctgccc tgcttatgaa agccagggga
132481 ttaagtcaag acttcactcg tgattcaaaa agttatctga agacatggcg ggaagtacag
132541 ctaggtctca ccacccctcc ccctccccc cagctctgca tgctcaactg aggacgtgcc
132601 acttggcacg ctggcactct cctacaggaa aacatacttt ggctattcag acgtgacttc
132661 ctggcactcg gaagctgttg gcatggaaaa attaacaggc tgacttggcc agggaggaac
132721 ggttaacaca aatcaccagg aaaagatgag ccctgagcaa gcgggagggt tgagggaagg
132781 gtcacggaaa aaagaagggg taagacacat ttgtcaggag tcccaggctg gtaccaagcc
132841 cactgcatga caaaggctcat tgagccctca cagccataca cagacatcac ggctttcctt
132901 tcaggcagtg gacaaggagg ctaacggagg tgaacttact tggcctggat gaggcagcta
132961 ataagggaca ggagctggta cacacatcat cacaacattc ttcattacgg tctctttctg
133021 ccttcaaccc cttgcccagt ttgtaacttc ataagggtggg gtaatgatgc caggaacttt
133081 gtagccctga ggcagaactc tgccccagct gtggccttcg taacctcccc ttactacaag
133141 cgacacagcc acctccactc aaatcctgac gacagctcag tatataacgg tagcgtgtta
133201 catactaact tgggtcatttt ggggaaagct gcttgtgtgt gtaaaggggg ggggggtggtt
133261 tggggcttgg gatcaaaaa atgagtaagt agggaaaaag accaaccatc cactgagatc
133321 ctaaccaggc tttcataact taagactgga gtcttcaca aactcacaca ggtagccata
133381 gaagctactc ctggaaatcc aatcctggcc agaacatgct agggccaccc acattcctac
133441 ctgcagcaac cttcctttct ccctcagcat caaccctaag atcctccagg gctctgtagc
133501 tcagtaactt tgcagggtgt taagtctaga ggagcccaga ggtccgtggc ctcccatgtg
133561 ggggttacaa ttctacaac cttaaactct gtaaagcgtg cccacaaggt ccttcagctt
133621 ctgccagaa cttccaaacc ttgcctttac acttaacaaa gcttcctact aaatatctac
133681 accaaatttc cgtacattag tttttctttc tgcttgtgaa aggggtgggtg gtgggtggtga
133741 aactagtcaa gatcggatat cctctgcaat accagcttct agaaaagagc gtttttgaat
133801 gggatgccac gtgctgtgtt ttgccatatt gcttgcgctt cctgcttggg gccagagtaa
133861 cagaaacctt gggcactggg aactgttccg tgccacgcaa attccactcc gtatcttcca
133921 ggcaaccctg tcgcaaataa ttcatgtcca ctacgccct accacacaga atacaactac
133981 attgtgctgc tagaaatggg aaacctgatt cagatcagag aaggtagaaa aacatttagt

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FIGURE 6CCC

134041 tcaacacaat actgccttta tgaaaagggg cgtgcgccgg gtgggtggtgt aaatcccaaa  
 134101 cctgtaagtg gggatagatt tcaagacgaa ttttggaaga aaatgcagaa tcaaaatagc  
 134161 atccagcttg actcagacca gtaataataa taacaacaac aaaaaccag ccagtccttc  
 134221 tagagctacg cctgttttagg ctgcgcgggtg ctcttaatgg ccagccagcc tgttctcctg  
 134281 ggaaatggtg ctgctgctac agcgtgactt gctttgcgtg ctgcaataaa agggaaacaa  
 134341 gcttgcacga cccaatagct tccttcagtt tgtgcctagc agcggggaga aaattaaaaa  
 134401 aaaaaaaaaa aaaagcctga aaaggggtcc tgaggcaagg tgaatggagg acaggatcct  
 134461 agagaacagc actgccctgc aggtattttg taaacagcag cctgtaatgg ccacgggttag  
 134521 agaaagaaaa acagacatgg aggggaagcgt gtttacaact gcagcaaggg cgggaggcgg  
 134581 agggagggat tccccggctc tgcgctcggc cctcttcact ccggtggggc cccgggggtg  
 134641 ggctgagctt cagctcccca ccccaatccg tgctttcttg gggggccccc catcttgttt  
 134701 atgggaaggt tactctcctt cggctctggg ~~gctctctt~~ ctaatactcc agctgcatcc  
 134761 ttgcgggatg ccagcttgac tgacaagtcc tgcagccaat cgctgggttg gcccttagga  
 134821 aaggtggaat ttcccaacaa actgattggc tgagagagag ggcggggcct ggtgattggc  
 134881 gtgttattcc gagtagaaag tagtaaacia ccttgggtcca ggggagggtg ggaggcgcc  
 134941 cgggtgccagc tccctctggc tggcagggcg ggggtgggaa gcacccgaga caaaaggat  
 135001 cctggctgcc acagcgggga gggcaggaag ~~ggggtggccc~~ caaaagtcag cactggagg  
 135061 cgtcgtttgg agccccccc ccccccccc cgagccagaa ctgctgactt taagccacac  
 135121 atcgtttttt tgttttgtgc agaacctcaa aggttttgtt tccatcattt tcacttcttg  
 135181 tatggctgac gaagtctcca atggaatgat aaccgattta gtcgcttttg tccagaagcc  
 135241 ccttctcac cgtcgaataa aaatttaaaa ttgtctttta cgaaagtgc tttaaatcac  
 135301 aactaaaaat tgttgacta tacaatacgc cattaatggc atgctggtgc accagacaca  
 135361 cagctacatc ttttgatagc aagtttttagg agctctgagc ctattgggag cagctgggat  
 135421 ggagaacata cacaaaaaga aacaacacat gacggcggtg ggaccacttg ataagaaata  
 135481 agcgggttaac ttgccttgcc catagtattt ctggcagctt cacttgaatc tcccattccc  
 135541 tactccagc ttcaccatcc ttacaggacc ccaggcggag gaaaccatct gctcttagga  
 135601 tgggggggctc tgctcaccac gcacataaac atgctcacia gtcgctatcc tgagcaagcc  
 135661 tcctcaatgt aaaaggggac caggaggcca gccaagccgg ctctctccac ttcaatgctt  
 135721 gttgaatata cagagaccac gttgtcactt ttcacaatca agatatatcg gtatcacgat  
 135781 atatcgataa cgggtacttt ataggagata acagtgcaaa ctggccacct ggcattctcc  
 135841 tttgccattc tagtccctca cctctgctat ctcttatgga gcttgccaca agcaacccca  
 135901 gtaaatgttc accccaagtc acctttgctg tataaaacat ggatttaggc tttccttggt  
 135961 ccttgacgac ttggcatcaga ccccaaacca gtagctactt tcattgtagg caccctccct  
 136021 ctggacactt tgttctgttc ccaggteect gccagacca cacacatcat ttactcaac  
 136081 gttgggttttt atgctttcta gactttacct ctgcctgccc aggagaggcc actgttctcc  
 136141 accgttctcc ctggcccagc taccocactt cttgcagaag actgaaattt gttttcttag  
 136201 cactaagtct ctgatagggc tttaatgctg tatttagact cactcctac gtttaagacc  
 136261 tgaacttctt gaggcctgga atggtattat cttcagattt gggctcttcag tggagatggg  
 136321 cttctactaa agtgcccgtt gcaaacttgc caaatatttc taggattctt ccctagcatc  
 136381 ctgagtatgc ctaccctga aaatctttcc ttacacacgt gcaattaatg tgttttctct

FIGURE 6DDD

```

136441 gctgggtcaa caactctgtt ttctctactt ggcaaatttc cactctgcct aaaatcactt
136501 cctctcttgg cataccttcc acaacctccc accaactaca ctgtgtacca agagcagaga
136561 ggtctcttcc cgttcttact tctctggcca gaattagcta caaaactaga actagcatgg
136621 tttgttggtta aaggaagagc ggagaggcaa aatttcagaa gtgggtatcac ctgtacatct
136681 gcataaccaaa cccattgcca tctgtagggg tgaagcagcg ccatgctccg tttgtggctg
136741 tgatgggtctc cccctgcttt ctgtctgaag gcctctgtct ctgaggtgga ttcttactcc
136801 cccctccatc tcaatcagag atctcctcct ggctcttatg ctatcaactc tgcacatccc
136861 cgattccttt ccaccatgac actgaactgt catctccttt tctatctgac cagtcactga
136921 cttgctcaca gtttagtctg tccgccatac agccatatcc agtggtctaa gaattgtggg
136981 gttccacagc tggggctcag tctctgctta cgccctcatg tgacatctgt catcaacctt
137041 ccatctttct aagcctttaa tgggtgaaaa gagnaacct gtatataaag agtgggtacca
137101 gatttcacct taagattaca gatacttgtt tgtgaataga atttgttctg gtaacaggcaa
137161 atgcacgggt taaaatcaaaa actaacaataa tatacagtat attagctggg aacaaatagc
137221 caactaaagc aatgtaaagc tgggagtctg tattctggct caaagcccat caccgtgagg
137281 caaacatgat ggcctgagct tcaggatgct cattaccaca ctgcatcctc agtcaagaag
137341 cagagagaac tgggtcccg gacaggggct ggtgctgcct aagtcttggg cttcccgtct
137401 ttaagttaac acggcccttg gcaggcatgc ctgaagcttg acttttcggg gttacagac
137461 cctatcaaac accataaata ataacaccac acatatatta catatataaa aactataaca
137521 cagaacactc aattggcttt cagtaagtgg gctatttttt tttctttgtt gcttaatgta
137581 ttctagatct gtctatgttt acaaacggta tgtcttctct actaacaat aggatttcaa
137641 attaaaaagc tgaacagcaa aggagacagt gaagagacaa tctgttagct tttcatctga
137701 caagggatta atatactgaa tatataaaga acaaaattta aatgtcaaaa gaacaaataa
137761 tcaaaccaat aaatgggcaa ataatcaaaa tgggcagttt tcaaaagaag cacaaaagac
137821 caatacatac atgagaaatg ctcaacaccc ttagccacca gggaaatgca aatgtaaacc
137881 acaccgagat tcaaattctc cccattcac aatggagcac attaagacaa ccatcaacaa
137941 aactggcaa ggatgcaggg ggaatgtgc ctgtacacat tgttggtgga aataaaaatg
138001 aagtagttta gatactatgg aagcctatat ggccaaaaat gtgctactac ctcacttcgg
138061 gatgtacaga tgtgatgcta agtcagcaca cgacacatcc acgttactat ccacatcagc
138121 caagcaatgg gaccaggaag agatgaagga aatgtgatgc acacgcacag ctgtgtcaga
138181 tgtcaaggat aaaaccaaac tatcggcggg aagttaagga gtggacaatc atctgaagtg
138241 acgctggcca gaccaaagcc tatctcatct gtgtattttt ttttttaat gaaaataaaa
138301 gggaggcttt gtacagaggg aggaaatgat acagaaggga aagaagggaac aaacagaaga
138361 taatgggtgg taatcaaagc acattttgta tatggatgaa agtattaaaa caagaaaaca
138421 gccatcttat cttcacagac agcattctgc tctatagata accctgagtg gtccccaacc
138481 ttgcctgtgt gtttaaatca ctgttacttc cccagaagcg gatttagttg gtttagaggc
138541 tatcacgtga gccttgaaat gaaacagtag aaacaaagtc ccagatgatt ctaatgagga
138601 ggcagggttg agagataaca gtaaacctat ttattatccc tctactgata gaacttgtca
138661 tttcagacaa caccatgtaa agtggcctaa tacacctgtc agttcaccgg tgtgctgggtg
138721 tgtctgtggg tgatcatcct gggagaatta ccatgtcaaa gggcacaggc actggtacat
138781 cagaaatgct ggcaaattac attccattac acacacacac acacacacac acacacacac

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FIGURE 6EEE

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138841 acacacacac acacacacac acacaccatc ttccagcccc ctctgccaaag tggggctggt
138901 ttcctataga tctgtcatca gaatctgtga ctgaacattt tagattttca agcatggggg
138961 gctgggagga gctctgaata ctcataaaaa ggactttctg atgtgttcta ctacaacatt
139021 tctgggtcct ttgtttgttt gttgttgttt acacctttat tatgaattca cttagagtct
139081 aacaaggatg gacccatgat ccaacatcag ttaagtaaag agcgtatttg ctccaatgat
139141 ataaaacgtc atcttattaa acaacgaacg gccacatggt ctcacatcta cggctggata
139201 tcatattctg tcccttcaca tactggcacc ttgctagcta tttaatcatt aattacttag
139261 gcaccatggg atgctttaat tatctggtaa ttctgttggg cttgtttagc actattacta
139321 ttatcaccat tattattggt gctattattg acgactgtag agtcagtttg tataattaaa
139381 agaaaccaca tagtatttga agtatattaa ctttataaac acaggaagaa ctgacatcct
139441 gctaacattg gttagactcg cattaaagggt atgggttctat catttatttg aatttatatt
139501 tggcagcatt ttgttcagta ctatttttct tattaatttt taagcatttt tctctgggaa
139561 aaacttttct tctatgatgt tgtatagcaa attatttgca cactgtagcg ttatcacatg
139621 actaagtctg gcttatgtta tttccagaag atgcttaatt ccatgccctt agaactctgag
139681 catgtatgca catgtgtgaa cccacagggc aactctgggt gctgttcctc cctccaccct
139741 atttcagaca ggttctcttg ctgggctgta gcacaccaat gaagcaaaca agtggctggc
139801 cacaagcccc aggggtctgt ctacctctgt ttctacataa cggagatttc aagcttgtgc
139861 cactgtgccc gtgattttta agatagattc ttcgacttga agtcagttcc ccacatttgt
139921 gtggcaatca tgccattgat ggagctattt gccagttcc ctgtgctctt agaactctca
139981 ataaataaac gacaccaaag gtcttttccc tccactagta tgaagtttat tatttttttt
140041 tattggatat tttctttatt tacatttcaa atgttgtccc ctttctctgt ctcccaaaaa
140101 ccctctgtcc catccctcct cccctgctt ctatgagggt gttccccac ccactcactc
140161 ctgctgtgtg gcctggcatt cccctagact ggggtattga gccttcacag gaccaagggtc
140221 ctctcctccc attgatgccc aaccagggtca tcctctgcta tgtgtgactt gagccatggg
140281 tccctccatg tattgggtgt ttagtccttg ggagctctgg ggggtctggt tgcttgatgt
140341 cattgttctt tcaatgggggt tgcaaacccc ttcagttcct tcagctcttt ttctaactcc
140401 tccactgggg accctcattg gggaccacat gttcagttcca atggttggct gcgagcatcc
140461 acctctgtat ttgtcaggct ctggcagaaa gtactttttg gcatccacaa tagtgtctgg
140521 gtttggtgat tgtatatggg atggatcccc aggtggggca gtctttggat ggcctttctt
140581 tcagtctctg ctccacactc tgtctccaca tttgtcccgg tgagtacttt gtaccactta
140641 ctaagaagga ccaaagcact catacttttg tcttctctct tcttgagctt catgtggcct
140701 atgaattgta tcttgggtat cctcaacttt tgggctaaaa taccaagggt ctaatcaact
140761 caattcaaac caataaattt tgacttgaca tttacaacgt aagcaattca gatgtagggc
140821 atagcactag ctggtagagg caagactgga tatggggagc ttctaacca agagtggaaa
140881 gtgttgggag aacaagactg agggcttggg gcagtggtgg tgaggtggaa agctaactgc
140941 gtgccttagt gcatgcctta ggaaagtatc tcagctaggc tactatagca gctatgcac
141001 tatctatacc agagaaaccc cacagagctg gacatacaga tgagctcatt catgtctgat
141061 gagctcattc atacacgtga tagccatgat gttctgctga acgttttatg agataaaacc
141121 aagtttctctg tttcagagct gtgtgtttta aggtatgtcc ctttatgaac attaaacaac
141181 cagctgtatg tgggtggtgtc aataatccca gaacaagagg gctcatggaa gaagggtcct

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FIGURE 6FFF

141241 aacttcagac tagcttggaa taaatagtgc aaccatgtct caacagacaa acgtaactaa  
 141301 aatatcatct tacaaccaa gaggtcccag cataaatatc agagcagagc tgcccagcct  
 141361 tgggtctcatt ccagacctct taacctatga cctcttgggc tgaggtcata gtcggcatag  
 141421 ggaagtgcct ggctagtaac aacaacacag tcacacatat ctgtcctcaa ggagctcctc  
 141481 gagtaaacac ctttgctctg atgatgacaa gcatggccac agtccctgtg cttgcagaat  
 141541 cttgggttaga aagctcccaa caccaccatc ttccactagt tagcctctgc tgttccccga  
 141601 actgaatccc taagtaccga atgtctcctc gttccacaca gaaacctctg agaagcccag  
 141661 tttacagaat cagagactgg gccattcctc gaagcattgc taaagaactg gcaggagtca  
 141721 ctcaagtctc caggagctat gggaagataa gattctcccc aatgcggttg cactgaaaga  
 141781 cagggcagta aagaacaatt atgcctaacc ccgatttctc tctgaatcca tttattactt  
 141841 ctcaatttag gagagtcact cttgtactcg caccctggcc actactcaga aaaacattag  
 141901 tgtatccat ~~gattccttta~~ gtaactactg gagaagcagc tagctgaagc atgggggaat  
 141961 taaggaagac cttaggagtt caaaacccca aagtacaaac gcactgtcag cacacggaga  
 142021 gatctgtttt tttatgcatg ccttatgcaa actggcctaa gctaaaaaat gttataaagc  
 142081 attttgagga gtaaatTTTg atttcagggt taaaaagaaa tgtacagagt caaagaatct  
 142141 ttctgttggc tgataacaga gactccttgg aaaaattgac atttcttttc gagaagcaaa  
 142201 aggtggagta gaaatagtgt gagcagcata tgatgtcttg tgacaatgca ~~gagaaggcag~~  
 142261 ttgggagctg ccactaatgt cgagttttca ttaggtctcat atctccaact tttggttttg  
 142321 tgaggctgca actcaattgt gtagtaaaaa aaattttagt tccattaggg tgcttttaat  
 142381 attcactata tctactatga aataggagct tagatgatga tgatgacaac aacagtaata  
 142441 gcagcagcta ctttgaaaca ctcacaggca ttgtgagttg gagccctgag cactaaccac  
 142501 tgtaatttgc tatcaggacc actgggtatg gcattcggaa aacggacata tgcaatcaat  
 142561 gcttgtgaca tgggagaaca aaacctgtc aaccaactgc aaacagatgg ctcattggaca  
 142621 acaaaacctt agagaaaaat gcaggaatat cagcggggca gtgggggagga aaagagaaca  
 142681 ctttccagac tgtatgcata gaagggcctc aaaggccgcc atgacagatg tgttccctgta  
 142741 tgggggtcaa caaagaataa agcccatagc acaattctta ggaaaagtgt aaatgcctgt  
 142801 tttgtaaata aaacacaccg acttaaatTT ctactactta attttataaa ttccgcttaa  
 142861 atatgtgtct aaatacactt ttttccctt gttttgagac atggtctctc tacgtagccc  
 142921 tggctatcct agaactagt atgtagacca ggctgacccc tgacgcgtgg ggaccctttt  
 142981 gcttcttcat ctggagtgtc gggattaaag acatacatca accagctggg ctttaagtgtc  
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 143101 agacttcaga gtttaccaag tttgaggggc tggccaaatc cttctggact tactgagaaa  
 143161 ggaacagacc caggacaccg actggagcta cacggtgggc gccatggcgc caggccgaga  
 143221 cacgtggatc cttcggcttt gcttctgtgt ctcagctacc tcagagggtt gctgtggaat  
 143281 cactagtatt ttaaacaatg caaacgcaat tacagttgaa gcacattctc taggagaagg  
 143341 aaaaggagat tggcatgtag aagcttcatt aaacttttgg ccttttcaaa gctaaacgag  
 143401 tcttaagaaa agccataaaa agttcccgtt gattgattta aaaacaggct tttttttttt  
 143461 tttttttttt ttgcaattag cagatctaaa tctacgaaag ggagaaacac gtacggcact  
 143521 ttagttaaac ttctgtcttt ctctgtgtat ttcaaactcg aacaattaag actctctata  
 143581 gacacacgta cagatacaca aatacttagc aggacgtaaa cttctatttt ggcttcatga

FIGURE 6GGG

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143641 aaatggtagt tatgtttcca cacacacaat gaattctggc agtttattta caagcagaca
143701 tcccactctgc accagggata ataccctcaa ctatgtgaca tgctacatcc ctcctgaaca
143761 cagtagggtc aggaaagcac tgagaggata taaacatgtt cagggttac aatattcctt
143821 cctaattgctt ctttcccaa cttactgtaa cgatttactg gaaagattgg actaaattac
143881 cgtcttccct ttatcgtccc aatttgtttg catttggtat cctctcctt ctcttggaat
143941 ctcccttgct tttccttttg tcagtaagtt aaattgcttc tcctcccaca tgcataaag
144001 cattaattta taaaacacat agctgtatgt catatctcat gtaattctat tttacatttt
144061 accactagct agacttatct aacatgaaca aatagatatt atttactgta gccagaatga
144121 gaattatcta atgccactta catagccaga aattgatttt tgattaatgt ttaagcgaaa
144181 agcaaacaaa cccatctgct ctgaaaacaa acaaacaaag aggagcagag cactgagtcc
144241 tcggttcgca ggcattcctg caggcctagt gcctcagcgg ctgcagaatg gggcccttca
144301 ccccagggga aagcggacca ctgacaagaa caggactcca gggccagact ggagtttctt
144361 tcccagcaag tgttgagtaa aagatttttt acttattggg gggggggggg agacgggacg
144421 ggactgggga ccacaaacaa caacaaatct ctaaaccctc tcaggatcag cagagaattt
144481 catcttgggc gccactgga agtcaaggaa gttgttaatg gtcattgttt ccttcttccc
144541 tcttgttcac taggtcagtt aaaagacaaa gaaaaaggct gggcatgggt gtgcatgcct
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144661 tctacagagt tagttttagg agagctagcc ttcacggcca tctgcccaca cacacacaca
144721 cacacacaca cacacacaca cacacacaca aactgacaaa atgtaaatca agaaagaaac
144781 aaaaacaaag aaaaacagcc ctgtgccatt tattcttata atctctgcgg tttcctcagt
144841 atgaagaaca gagtgcagtt tatagttctt gtccactcca tttatattga atatataaat
144901 tattttctaa gatacttata tacataacca aatttgtttt taacaaattt aatgaaaaca
144961 ttcagcatga aactaaatag cagtaagact ctcagatggt gtcttagggt aaaaacaaga
145021 ggagcactcc aaccttttct ttgacaaggc ctcttgatc ccaggctaac ccgtatgtag
145081 ccgaagatga cttttaacag ctgaccaggt cccttccacc gcttctgttg tactggatcc
145141 cagggcctcc acgcaccca gagaagcact ctaacaactc actgccagct aagctacagc
145201 ccggcctcct ttggagcact ttcaacagcc aaaactgaca caatacatat gcatacaaa
145261 gcaagctgaa caccaccac cgggtgtgct agagaagaga ctcaaaactca caactttcaa
145321 agtcccatac caagcctgat gatgcaaa caacttgaag tcttattggc gacgctccgg
145381 atactaccag ttgctaaagg aacagagtgg gactgcgact gcattctgaa acattttcta
145441 caaatactca tcctgcacga agaagtaagg tgcaagtgcc tttatgactc tatttccact
145501 ctagacgctc aggtcaagg cagagcgctt agatcctgct gcacttccat aaaaacaagc
145561 ctgatttatg ctgaaagact ttaatgacaa agttgtcctg atgtgcgtgc gtgctgtgtg
145621 gcacgcgcac acacacagac acacagagag agagagagag agagagagag agagagagag
145681 agagacagag agggagagag agagagagag agagagagag agagagagag agagagagag
145741 aggacctaga gaacaagggc ctttgtcttg ctctgccgaa gcacagttag catttcctga
145801 gccctgattt agcctttaac tgatggttct ggtttggtct tcaacagaaa taattgcatg
145861 actgacaaa aaaggaaagg ccaaacaagt cttaaataat gattgttggc gtaccaactg
145921 caccaacctt ttctaattac aactctccat tttattattg tcaggcaaaag tgagtacctt
145981 aacttgaaag gctaagctga gggggaaaaa cctttttgtc tctactttac aggtttgttt

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FIGURE 6HHH



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146041 ttataaacac tccctcagtc cccccaagc aacaggaggc aggcacaatg accctactga
146101 ggagtacagc ttttacctcc atgggacaat agattgcttt tctgttagcc cctgggagta
146161 aaaccagctt taatatggat gccctttcct tatcaaagac agcagggtaa tacggggagg
146221 gctgccaagc ttgggttggt cggacttggt aggtatgagg cctacctgc ttctacacca
146281 cgtcactcaa ggaacagagc agaagaaaca cgttctggaa ctttccagag aggccatcct
146341 tgttcatgta ttctagtcca gagttctact tctctctaca gagatggatg aaacaaaagc
146401 aaaacaacac agagaaaaac cccttctaag ggagctggag ggaggagata atctagagag
146461 aggatgccaa aagtggcttg tttccaagt acaaaatgca cctttgctgg ggaagctagc
146521 aaggtagaag cccctgttca gaacttttca aggagcagat gaagacaaaa aaatgccacg
146581 caatggggga cggaatcctc tagatgtcga gaaaaagcag cggccatgcc caggagcag
146641 gactagagag aggcaagcca actcctgtc atggcaaggc ggcttgccctc tccagcgac
146701 tctgcagatg tttccgcacg ttgtttctat agtctgaaga cactccgctg gcagtgtatt
146761 gttggatgct ggcagaatct ctagtcaaga ctagcaactc cacctccttc ctgacatcag
146821 caagggggaa cacaccagga gccaggagac aagggtgtagg tgcaggagac aaacaccgtg
146881 tgtggtccag agctgaactt gctgctggag actgtcctgt caggaaaagt aaaaaacaaa
146941 ccaacacaaa aatccaggag gtgcagaggt agaggcagag gcaggcgggt cctgtgaat
147001 ttgaggccag tctgctttac acagtgaagt ccaggacagc aggggctgta tagagagacc
147061 ctgcctcaaa aaacaacaca aacaaacaaa aacaaaagaa ggggggtgaag aagagagggg
147121 gaagggtggg cggggggccag ggggtgggta tggggaggga aacttaccct ggtggagaca
147181 gtgaaactgt tgtttgccac tgcctctctt aggtagggtc taactgtact cctgactaat
147241 cttcaacttg ctgtattaat caagttgggt tccaactact cttggaacta caggtgcaac
147301 ccaccacacc atcgaagtct tggcgcacag ctctaggggg cataggaaat ggctttcccc
147361 gtgccctgta gaaatggaac tgaaagctca tcatggcggg aagactgttt tttagctcac
147421 actctcacac tgcaaagac ctaatgacac agcagggcct ccggtaccat cctcactccc
147481 acgctccac tccatcctaa tgtagctca cttactcagt ctaccacagg cttaggtgac
147541 atctgaagga atagcatact ataaaaacct gacttggcca ccacagcatg caagctctaa
147601 ggcaggtaga acatactggg tttttgttgt tgttgtttgt ttttgtttgt ttgtttttct
147661 tttccagttt ctccccctca agatcttcac atcatgagtt atgatactcg ttcattacat
147721 cctcctagaa tggctccagt caagaagaga aggtcaatg acccaccca actgcaaaag
147781 caaaattatc ttagaagaag aagaaaagga atggaccatg taattaaaat tacgaggggc
147841 agtgacttac agaggtaaaa agttaatcac aaggactatc tcaaagccta gtgaaaaatg
147901 gggttttcag aatcagacct gtcaaaggta accacgagat gcaataatgt ggtttggaag
147961 tctgggtgac gggcagcagc aggaacaggt caggggaagg gggagtaaat tgtttgcaaa
148021 atgaaatgca gaatgaaaga ccatttgagc acacaggcat ctactctaaa acctgcaaat
148081 acctcagcct cagtcctctc acggaggact ggggagtgtg cactcttctt gttgctttag
148141 aggaggtctc tgctgcagaa gcagggtggg tgggtagagg ttcctactga aagctacttt
148201 gggatatccag caccggggg ttggtagcaa ggagtccctt taatgaataa atgaagctgg
148261 agctttccag atgtttcatt aatggggcac ccagaaccaa tgctgctgca cccgtgcccc
148321 ctacaactac taccggcatc tgggagcact tagctctaaa gtaggttaga gctggagtgt
148381 aactgtatct atgtgaagac tgagtttgta tatgggaagc tcagcataca gcaaggccct

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FIGURE 6III

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148441 acgtgctggc tatcactgca atccaggcaa aggcttcctg gaaggctaac gaactataac
148501 ttggctgata atgccgttcg ttcattggctt cgtgagcgct ccagtcccgg tggccttggc
148561 gagagttgga gttgagtgga gactgcaggg acggaaaactt ttccagcaag aaagagtccc
148621 tcttctccca cggtcactaa ggaggatact tgtatttttc caggatcagc tgagtcgtca
148681 caagaggaga gtggaggggc agggaggagac cgcctcaggc ggcgacaagg gagcccagca
148741 cctcccctga agttgcagcc agctgcttct tggctggaaa cttatttaag ttgtcctotg
148801 tcccacttct gaggtcttac agggatgctc tgggcactgg gatccatgaa caaacaggga
148861 tgagcggagc gaagggaaca ctctgctcag atgagtctgc ctctcaacgc cctttgccct
148921 cactgtgctg gtggggagtg ggggtggggg aatctgatgg gcaaaaagcaa ggggaggaga
148981 tgtgactgtc acgcagaagg tgtgcccagc tcttagaaaa gtgaagaatt caagaaagca
149041 aacacaagca tctctcctgc ttctactccc tagttatccc aatcccaatg aatcttgaa
149101 taattttagt tactgacact ccagatagca tcttcaacag tgaagccaga ageagagcaa
149161 agggatctta gtagcatgtg ttaattttca tgcaggatgc aaaacaggca tttcaacttt
149221 catctttctg gatgcagcta cagtggccac catccctgac caggactctg tcttcatctc
149281 atccttctaa cagttatgca tcaagagtgt atcagtaacc atatcaccat gcaggatgtg
149341 taacttgccct cttctctccc gtttcaggac agccagccac tggaaagtct gaggggcccg
149401 gctaactgaa atctgcagat acgcttagga atccctccca accagccggg ttaacctcca
149461 tatgtttcta atctctaact tgtacccctt gtgcagcctc aaagagatac atgtcacttc
149521 ccgcaactgat ctgacaaccc tctctctgag aggcctcataa gcacccttc ccaaggatgg
149581 tcacttacag aaagctgcag gcaaagtaaa tccaagtctg ggcagcatat aataaatggc
149641 tagtggcaga taatgaaaag gctgaaatca caaaatcaaa attctttcca ataaaggtga
149701 atcccacacc tattcattaa cagtcacctc ctgtctaaga tgtttgtgta agatcaatga
149761 ataagccatg tcagaagact tgccgactat ggaaactatt tggataatgc tccaaggggc
149821 tcaggaatag gacagatcca atttagaact gggggggggg gggaggggga cactctgtct
149881 ccaggccagg tgatgaagac ataccagggg tcattctttc accatgacaa agacatctcc
149941 attgtttcaa agtcactttc agtctcctac aaagttatct ggagaatagt gtgccatgtg
150001 aatgaatggt caaacttaag caaggggtacc accttccctt cagaaacaac cagagaaata
150061 cgaaactgcc tctggggcat cgcaataagt agctggggct ggtaagctcc aagtcttacc
150121 tctgaagtca tcagtaagca tgggacagtg aaggtcaga cataacatct catccaagta
150181 atcaagagta acgccacca tcacagatgt actggtgcca ccctgggcac agtgacacac
150241 cgagggcact gtataccctt cctgaaggag ttaatcactc aaatgcacaa acctaatgtc
150301 acgagagacc ccagtttaag agcagggttat ggggtcatag gatgagtgtc cgttaaaagt
150361 gacaacacca tgcaaaatca gcaagacaag cagacccatc acagcctcga gaagaccaca
150421 cagataagac acatccacac gaccaaagac ttgggaatga aagaaagcac gttagtggga
150481 aaactggtgg aatttaaata aagcctgcta agaattattgt gccaatgtta gtgtcttggg
150541 tgtgataact ggattatgat tatgtaagat gttaacatga ggagagctgg gtgacatttc
150601 aggaactctc tgtgccgttt tcaacttttt ctaagggtttt tttttttttt tttaaatgaa
150661 gctgaggagg aagcagagag cctggggaggc tggettactc tttagtttgc tttgtcactt
150721 tgtccctggt aagtaggggc attatactac agagctggct tgtgttacag ctcttccgat
150781 tttgtccctc ccatgtcttc ataacttttg gggaaatcgga tgttactcag gtgagacaga

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FIGURE 6JJJ

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150841 agatgagtga agtcacaatg tcattggaga ttagagagag aaagagagag agacagacag
150901 atagacagag agagacagag aacaaacttc aaatttataa acacattatt cttccacaaa
150961 ggtccacatc acacactccc cccatttgtg caccaccctt gacaacacag ctgtgtgggtt
151021 ctctagaaga tgtagttgga accaactttt agcgtcctaa ggaatgatgt catcctttgc
151081 tctataggag ctggttccag aggttttgtg gaacagcttt cttccagaa agcagccagg
151141 tctgaagctg ctcagacttg ctctagactt cttctgtcta cagagtacgg caacatctcg
151201 tctacagggg ctgcgactgt tccggctctt tgatcatcct gttccctaaa cttacttcc
151261 ttaagttgca aaacattttac tcttggttgt ttgggtcctt cctcgggata gaaattcata
151321 ttctctgttt ctctctctct ctcaacgggg ctgtggactg aacttacgtg aacttcttgt
151381 gtttgcttgg ctttctactga ccctacacct tcagtccctt tcctttgtac ggagaaagaa
151441 atcattaaag agaaaattgt tccttaaaat catcccttcc cccatcctcc aagccttctg
151501 tagaaagtgc agtaattgaaa aaaagatgtg tactcacact ttgcttgtat cagctatgga
151561 tgggttccta cctatcttat tgccaaactg aaaaactact tggaaaatgt tccaatgggc
151621 tgggtagaat aatagctcca agtcagaact ggggtgcatg ggggtgtgtat agtctccaga
151681 gtggggaagg ctggctactt gtcgggtcct gccctatcag cctaccagtt actacgtgc
151741 tcttccctgg cagctcagtc agtgtgcggc gtgggtctctc ctccctggcca tctaaaatgt
151801 ctgcagttat tgtaacacag gatgtgattt ttagatcaat ataaacctgg tagaacagatc
151861 aatcctgtcc ctcataaaca caggcaagta tctgggtatc ctaggcagaa ttgagcccaa gtaaatgcat
151921 cctctgaacc aaattctcaa cccaaacctt aactgctagg tttataccag ctactttatg
151981 gtgtgcagaa gtagaggttg actccttctt ccctttcagt ttaaaggcca aagggccctt
152041 ggggtgcccc aataccatct ccaactaaaa ccttttgagt agtcacatga atccacaatg
152101 aggtaaatgg ttcatttggg gaggcctcct ctctttgagc agagttccat gtctttccta
152161 gagaaagaga ctctaactcc tgggatttct ggtaacctaa tatatcaatt ctgggtggagt
152221 cacaattggg ccccagacgg ctcaagtctt attgaaccga tatatcaatt ctgggtggagt
152281 taaaatgctg agtaagagaa aataaagctg aagtaagcgt aaagacaaga gttgttttgt
152341 tttagctgga acatgattct ttgatgagaa aactctcata aacaggaaaa agcacattat
152401 tgaagctgaa gtgtttgatg gcttccattt tcctaagagc atttcgcctt agacacaggt
152461 gataactgtc aagagcagcc agagtgatc ctctggatat ttctaccata aatatttctg
152521 aggtcctact gtgtgccagg gattgtagt atagtgggga taaaaagata ggagttgagg
152581 ctatatacat tcttttcaaa ggcaaagtct cgagctctaa acgcacgact caaacacaaa
152641 accatgatat gcaaaggaaa caaatgggtt gtttcttggg gacaggttga acagtaagta
152701 tgggtgacagg ttttaattag aagacttcag aagagcaggg ctggggccatg taaatcaaat
152761 cctatatcag ggtctgtact aaactcagaa agactaactc aggcagttac tagagttatc
152821 atgacacctc acagaagttc atataaggac cctaactctg aaagcagaga tttgttgttt
152881 tggttttttt ggctgcctct agctagcaca tttatgaaaa acaggttaag ttactggctc
152941 caaattactc cttaataaaa aaaacaaaca aacaaaacag cataagcttt taagattttc
153001 ttttttaaaa cctagaaaac agtctccctg tcaagagcag gcatgattaa tgacttctgt
153061 gctgtaagct tgggtatccg ccgtgttact agtgtgtgat actcctaaca gcttgtaatt
153121 gccccgagga tacttttggg actgaaagggt gtggggcggg gcctaccttc ttaatatctc
153181 cataattttt tggggggggg ttagactaca tttatcaatg ggacattgaa aatacagaaa

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FIGURE 6KKK

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153241 cattgtcaag tcatccacat gaaattatga atgcattatc atctgaagag tcatttccat
153301 aaaacggcag atgacaaata gtcagctctc agtatccatg ggggatgggt tcaagatccc
153361 tccctcagac atgaaaatct gagatgagca agtttcttat tatagatggg aaatctgcat
153421 atgatttaag tttttcttcc tgcatactag aaatcagagc tagatgggtt gccatacttg
153481 agagcgcaca aacgctgcgt aaacagtcaa ccgtacggca ctgcttagag cagtgggtct
153541 caaccttcct aacgctgctt ctcaaagtct gggaatggaa ggtgtgtggc accatgctca
153601 gctagaatcc cattgtaagt atggcactgg ctggacctac atctgcagaa ctccagggtta
153661 ctgaagggtc gtactgcac ctagcagctt cctaggtctt aggaagctac caacctgcaa
153721 actccttctg aggtgaaacc acaacagggc atccaccaa ctcaaccact ggaacccaat
153781 gaaccagtca agttaacaga aactgagcc accttttgtg ctccatgaca gccctgacag
153841 acaacatagg caagctctat cacactgtat ggctcaacca gccatatttt ccatagaggg
153901 gaaatggagt ttgctgcttt gtttggeaga tgcacagagt aaagtagagg ggaaccaaat
153961 gagcttagag cacttgggaa ggtaggctga cttcctagtg tgttccactg taccacgcaa
154021 tcccactatt agtccccac ttctctggt caacaccaga tctgaacgaa acctacagga
154081 aggtttgaag gtacctggcc ttctaaattg tggcttacat aataacatca ggcctctggt
154141 tagacctgt aggtcaacaa cctaggaagc caattcctat agtccagctt aaataacaac
154201 cttgtgtttc aagggaaaat aggaaggtgt ggaaagcctc cattgacacc ccaactaact
154261 tgcctttgct tttctagaga caactatgca cttaagaaag gcaatcgaga tctgcagtta
154321 atttacagtc actgagatga ctcaacatac gttcatacta gtagtatctt cagcttctcc
154381 agtttttttt ttttaaagta gaaacaaaat gtccggcctg acattttaaa aacctgacct
154441 atgaggaact tgaaatggtc agtttttaca atttctctc ctttctctaa
154501 gtcattcact gaattatgta actgactcct agaacacact gcagacccca tatggaataa
154561 gacagcaca ctcctgcatg catgatcact gctgggctgc aggaatgtgt taagacacat
154621 gtctgtccct cagtagtga gacacaatcc ctgtcttgcc ctttagaagt ttataagatc
154681 cctgggcaca cagaacttgt gcatcaagtt aaagactaaa gggccagagt ggggttgaca
154741 agagcaattt cttaagagtc tgaagaaagg gagccagaaa catggagaag gcagtgaaga
154801 ctattttcag cagagagaag agagaatggt attgagatga aaatgtggat ggcagattcc
154861 agtgcaaggg gtgcagatct catagaaggt gggtcagggg tgtgggggtt gaaaatggct
154921 aacagcgagc tccattatgt cacagcagag atgacgcaag gagctgtctc ccagcaggtg
154981 agatgatgct gggtaggcag gaggtagaca caggaagtgg atttaggaac ccatagcaac
155041 catgagggag aatgaggggt gaacttaaat aagggagcat ttacgtagaa aagagttggc
155101 agaattaact ccatgggaaa cttagtggaa ctgaggacaa cgtgtcaact acaaagacca
155161 gaaagcaggg ctagttagat ggctgagtga ggaaggggtc ttgctctgac ttcaatcttc
155221 aggagtcaca ttccaggctc tatctccaca cgtgtgctat ggcacgtcca cacatagagc
155281 aaccaaataa ataaacataa cattgaaaga taccagaatg catgctgtct ttgaaaaccc
155341 tattcattgt cttaagtata agatgacagg gccatttccc aaaaccatac atcttgtgga
155401 gacacaggtg gggcaaaacc aggtcaagtt cagtggacag caggtacca atggacttat
155461 ggctatacct ggtaaggcaa gccatgaaga tgatgagttc tggctccctc gttcttcggg
155521 aacctgaaat ctggagaagg gggagggggg agggaggaga ggaggagaag gggaagaggt
155581 agtgggtggtc actggtggac agggaagaac atctaggagg aaagaagcta cagaagttac

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FIGURE 6LLL

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155641 tgacggcagg agaggggtcct tccaggccat ggaaacactg ggcctcaaag gacaggctgc
155701 tccagtctga tgctgcatca gaaaccaca gtcaatatat tgaagggtgga aatctgaaaa
155761 gcaacttatt ttataattaa atacttttat gatagagaaa aaagcaaaaa gagaaaaaaa
155821 agcaaaagca tcagggttca cccaaacaca gcaatgggtca gtttgggttc atctgagatg
155881 accaacaat gccaatatta gagttacagt ttttcaaggc cataattgct acatttaaaa
155941 catcaagagt cacagactgt ccccaaacag tcagagccct catgacctgc ctgtcccagg
156001 atctgagagc tacagtgttc tgcttctatt tagagcatta tgaatgctaa atagaaatgt
156061 tcaaaatatt ttacaaaatg aaaagtagac atcagtcac tgcagggtcta aggctgttct
156121 ccaactttaa aatacattag ttcttttttt tcctttcccc tttttctttt ctggagacaa
156181 ggtctcagggt agcccagggt ggcctagtat tttatgtgtg actgagaatg acctgagct
156241 cccgattctc ctgcctccat ggaccaacga gtgcagttct tcccccttaa ggtcacata
156301 gttgaaccag gaaggatggc tcatgcctgc aatcccagca ctcaaagggg aaaggcagga
156361 gggctgtcct gagttcgaag ccagcaggga ctataaagt agctccaaga taggctgcgt
156421 tgcagaatca caacacgtct caaacaacaa acgtagcaga catatctaac ccttaagcat
156481 gacaacgaca catttgtagt atacctgaat aataagaagg ggggtgcatca ttataattat
156541 tattatttta cagttgtaaa catgggaaag tgctgagcag ttcaatgagc ttagggttac
156601 agtcactcaa ctgcatgcta gctcagatga ggataatgca gaaacgcctg cggggaggaa
156661 ggaaggagca aacacttctg ccactccgtg aaatgtcact caaataacaa aacaaacca
156721 ccgaccgacc tctcaggata aggaagtgtg gcggagtggg aacacactct tgactgggtg
156781 gtgagggggc ctgggattct gtacctagca tcacacacaa aaactgcaaa caaattcttt
156841 aagccatgct tggtaaaaaat gactcatttt gaacctagt tgaattggag attatttttc
156901 aattaatgaa gtttttctag ttggaaggac ttacaacaag ggccactatc ccaaaagccc
156961 ttagggaatt gtctaaatga gtaaaaatat tgtgcaatta ggccaacaac tgaactaag
157021 tgcgtctgag agcttaaaag tagtcgttct caagtactag ttcgaagagc atcaaatcat
157081 ataaaagggt caaaggaatt taagtgaact ggggtgactt ttcaaggcac tgaggtaatt
157141 acaaaataca ctaaatagca aatattaggc ataccctagg tttagacaaa caaaaccacc
157201 ctaaaaccgc cagatcatat agacacacac acacacacac acactcattt tctctctctc
157261 tctaacacac acacacacaa aacacattag ggtaaatatg tattagaaaa acctttgcct
157321 aagatttcct ttaaacagtg ggtattatc atttttgttt ttttctttac agaacttaaa
157381 tttctttgca aaatgtttgg ggtacagaga ttgcctgaca agagtggcca ccatgaagct
157441 tatgggcacg tgagaggaga ggtgaagaag cctcaatctt tctgagccca tttcatctcc
157501 cctattatc tccacgattt tcaaaagcca ctctactaca aacctgagaa acacaggagg
157561 tcagattcac aaatgaaatc tctttgtctc ccttctgtat gcaccagca tctgctccac
157621 ctagctgacc gttacagggg cagggccagt gttaacatgt caagtgggca gagggctctc
157681 tgcactctct agtacatttc tggctacagg tgaactaaat gacaccaaag aactgctctc
157741 aaacgtgcat cccaaggtag agctacaaag gttcaatata accccagtat tttgagagat
157801 cttaaaacgc agtcaaagtt aactgtcatg tccatagcaa ggaggaactc actccttagg
157861 atacactggg ctggctctcc agtgggcatt tcagagagcc ctgctttccc atatcagctc
157921 catcctgtat cctcaccgtt gcttccaaca ggggaaccgtc cacatctgac tgcccaatca
157981 gatttcagca ggtggcatgg gggatccaga aagcatttct ctgcaccttt taactctgaa

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FIGURE 6MM

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158041 ctgcatgcag aacccgtggt aagaaatgct tctctgatcg ctcttagcac ttttagtggc
158101 catgttaaata cagctaagta agaattgactc ttccatctgt gtttaagtggc cttttaaacg
158161 taattcacac tatctccaaa taccctgaat taccaagtct gagggctgcc tagattcctg
158221 cttgtaagca atagaatgac actgaggact ctcggtcttc ttctctctcc catatcctct
158281 ctgggttcaat gagaaccaa catcatctaa acagaacaaa aacatcagaa ctgaaggaat
158341 cgccaaagta tatacacgtg actcccgtct gaatgcattc agatccgacc agtgactcca
158401 agcttttctgc atgtttccca tgagctatct gccctgaatc aactcctcac cacaactctc
158461 gaaatgacat ggacctctgc tgttgcaact attattcctt ctctgatggg gagtgggtat
158521 gactgaaaat tttcgcgcaa ccagcctcta aacagaaatg cagtttattc tgagtactca
158581 aattcaaate tcagtaacac agcaattaca ttttaaaata aattctctcc atgttcttgc
158641 ttctaagaag agggtttagt gggatatgaa gagtctaate ctaggcaacc atatggccag
158701 gccaattata aaccccatat atgttcacac atcaagcagg gcaactgct ctgggaacaa
158761 cccttaatat tttattgcct gcccaggtgc ctgagcactt ctgagataca cctgtcacag
158821 gaaaatacag cacttccttc catctttacc ccatagttgc cagacaattg ggcagagcta
158881 aagtgggtaa tgttgcaatc aacacttccc taaaacattt atacatgcca ctgataaaca
158941 atagaaatct aaaggagata caaatgtact ccccaaacc taaatcttcc tcccacggag
159001 gcctaaaaac ttaaaaatct tcatctacct ggcacagaag aaggaataca aattccaagg
159061 ggagcctaga tttatggcct aaatatgtct tcctctagaa tatttaatac acttacgctt
159121 tagtcattcc atacattttg aaaatactct agcacgataa attacagtag ctgcatcttc
159181 catgggtgtt cacataaata tcatttggct ttcaggaaac caattacgga gcggtaaatc
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159361 caaccctga gtaagccaca acaatatttt catgttctaa aatatttggg ttatatctat
159421 atatttcaca caggtattag gctcagcaag tatttctctaa cctcctgtag tatttagttt
159481 tcaagacttg gggtaggatt gggaccacat tgatttcagg gtgctgactg tacttctgtc
159541 accatcagct agtttaagga caatgactgt cctggcagac accgcaaaac cagagcctct
159601 atgggtgttct tgagaaatca agaccatcat ctcatggaa aggcggtggg aaacaaggtg
159661 cagggccatt gagggccacac aatcaacaac aggatttgct ccagcctcag agacacagag
159721 tggactggca tactatatca atttggaatc ccctcggcta tgacaagttt gtgaaatgaa
159781 agaacaaaac aatacagtac aagatcaagt tttagtagag agaatgcaga caaccacaac
159841 cgagtactta gggagaaaaa aaaaaaaccc agctcttagc tggggagtgga cagtcaaggg
159901 gggaaatcac gcgaaggaat ttctttcagg tgcaagaagg catgagagtg ggagacaagg
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160021 gccgcagaca agcttaggta tccggtgggg ataacctaca gttaagacat cacattacag
160081 acactagggg gccattgtga attacagcca acaggtgaga atcataactt agcggggcgg
160141 acacaacaac caagccgtga tctagagcag gaagcggggg atagacagaa agacaggttg
160201 taatggagga gaccaagcag agggctgcag taaggcagag gcttctgtgc tgaccaagtg
160261 actaacacaa agggcccttg cagaagacca gagatgtcag gggggagaaat tccttctgag
160321 ggggcctagt tacactagcc acttgatatt caccgggaag gaggcagaga agctaggagg
160381 gtgggcacaa aggcagtgcc tctcttctac ctgaggagag ctggcagctc tatcaatacg

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FIGURE 6NNN

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160441 gactactcct aaatgggctg cagtcagccc agaaaaaaaa aaatcactc aatactctca
160501 gggttacctac cctggctccc aaagctgggt atgcaagaaa tattttgttg ttgttttgct
160561 tttaaaagga gacaactgat gcttgtttta gtattgtttg aactacatca ctcacaaatg
160621 agagactgat aaagagattg acaagtctga ctctagaagc aaacacttcc agtctgctct
160681 catctgccct ccccaacttc ctccattctc ctccggcctc accccacaat atgcttgaaa
160741 atagtaggta actgagtttg ttttgtacgg tggttgtctt gttatttcaa gcaggggtgt
160801 ccagagagaa aaaaacattt tctggaaaga ttttaactac tggatcataa acaagcgtgt
160861 ggtggccacg cagcaatctt tgtaataacg aatccaagac gtcctgggtg tgaagcccag
160921 tgaatgtaat gttagctgaa aagcaccgcc tgacacacct ggaaatgtgc cacggggccag
160981 ctttgtagac tgcgacttca aagggaaact ggagtctact tccgcttttc agtgagttag
161041 aaatgatttt ggctgtattg gtagggcaga accagaaaaa aagttttgaa tttgtcataa
161101 taatttaeaa aadccaaacca acttgtaaag atgcctctc caagcacaac taagctggct
161161 atagaggcta ttctgcattc tgcactcgtt cccctggact gctcaggctt aggggtgaggg
161221 aagaaacatg acttaagcca ttacccttat tctgtgggca tttgaagtgg ctgccaggca
161281 cgtgacacca actgttccaa ttgggttcaca atgacatcac tttattatc aactctgttt
161341 gcattttcagt ctctctcttt ttccgggggac ttgaggccaa tcctggccaa gtcactttag
161401 aagagaaaaga agccagtcct aggtagtcac gaagtgccaa gtgtcttttg tgtctcctag
161461 cctagtttgt aagccgggaa ctgggtgacat aaagggctct gtcaacagcg cccgggtgtg
161521 ctgcttccct cgcagcggga gagggagatt gggaaaccag tagaaggtgg cggttcggcc
161581 ttgggtaggt cccaactgac caagttcaat aaaatccctg agagtttgtt ttcaattggg
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161701 ttgtacttcc aaaaaaaaaa aaaaaaatgc agaaaaacatt tctaatttag tcaagcgcac
161761 tcttctttcc tcgagcaatt agtcttaatt catgtcacct aactactatt tctgcattaa
161821 gcaacgtgac ctctagaacc tacagtaacc ccctttctga tggtgaaagt caattattct
161881 gatttttttc atcttcacac aataagttac cagagaataa actaacttca aaaaagcatt
161941 acagtgtcat gtgtgttcgc ctgttgatat gtgcacacat tcatggcacc tgtgggtctg
162001 tatccagctc ttctactgtg cctgtctctc aattttgcag ctcaacctag agatcaccaa
162061 gtggccagcg agctccatgg atcagcccggt ttctgccctc ctctgtacta agattacacg
162121 caatcatgct gagcctctaa gaacatggcc gctcatggtc tgaactcgga tctccacct
162181 agcatggcaa acatgttagg aacggggcca tttcctcaac acaaaggaaa aaggcttctt
162241 catgggagag aatgactgga tgggcgagta gacagatgaa aatggacttt tcacaccaac
162301 tgggttagaga ccctgttgct tccaggcaca aagcacacca gtttctagta tcagtgggtt
162361 gaaatgcatg ttttaagctc ctcatcctta cttggctctt gacaggaaac ttttatgggt
162421 gaactttatt ctgtagaaat gcagtggcat taaccaagca cacaagcca actcaagcct
162481 aaagtgtgcc catgactcca accctacact cattgggtct tgccagaggg aacacgaaac
162541 agtgtataga ctcagaactc tgcccaggcc tgtgaggcag ggccaggggt acacaccttg
162601 caaacacaca gcaggctctg cccaaggagc gttcactagg taactatcag ggtgggtcaa
162661 gggctgtacg acagacagac cctgcacagg cagggaaagt ttcttgga cctaccatct
162721 attttcttgt aatctcaact gatgtgttct gccaaagtcaa ctattattta tcatttataa
162781 agcagctcct attggcagca tactctgcat atgtttcagc acttcataaa ccctccacgg

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FIGURE 6000

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162841 tataatcgct tgtggaggag actgggttgc ctggagctgg aatacagacc cacacgcatg
162901 tgagcccgtg taaatgcaca catgaccgtt ccctaccgct ctttcacgag tcatgtcttg
162961 gctctgtagg ccgagtatct ataactaaag ctctctacag gtgtcaaadc aagcaatctt
163021 ggtcctctca gatgtcagct aatggccttag agccccccc ccctaacagt tctatttgca
163081 ttgctaacca aggctatcca ccttagtate atcatcagtg caagagaagc caaactgcac
163141 acgaagacct ggagagcact tcagagcaca catccgacct cttcctcatc cgagtaccta
163201 gcaagccagt tttccttcct ctccctgtctc cagaagaagt tccaactcca cctcggagca
163261 aagcagcagc tgcagtgact agcagtgact atgcctttgt gactgcgtat cactcatcca
163321 attcacagac tacttagcat cgacttgat acactttgcc caagaataaa tatttatatt
163381 cccgaaacac agtcgatcga gagcagctga tacagggtcg gagatgacag aggcagcaaa
163441 cacaacaag taagacctcc aggagtgtga gggacagggc tagagacaaa gtaaacagag
163501 gccacaagat cctaggcgct aggtgggggc taetggtag taagggtgc tggaaagaag
163561 agtcctccgg ggactggctc ccacaaaggc tgcccaatct caagtgggtca gctctgggcg
163621 cttgtctaga tggcaatgct gcgtggactc agtgggttat gtatgcgtgt gtacatgcac
163681 atgctaggat aataattaaa aataagaggt catgagtttg ggaggttggg gtttgctcat
163741 gggagcaact ggaagtgggg ggcagagaaa gggctgggag tgacacaggt gtagtcttg
163801 tgratggtct aaagattaaa ttagagttag ggaaaaaaa accccacagg aattgggaag
163861 agtgattccc aagccactga cacagcacag cactgcttgc ctgtggaggt gctcctgtgc
163921 catcctccct aatctttatg ttgcacatct cctatccacg aatgcttaca ggtgacgtta gcatcagcag
163981 gcatgtatct cctcagcggt agatacactg gaaagaaaac attgtaccct gatttgacc gggaagagga
164041 ttggagaaca acgctaagca tataaacatg ttaacggtca agtagagtcc aaatcagatc
164101 gaaagggaac acgctaagca tataaacatg ttaacggtca agtagagtcc aaatcagatc
164161 ttgccactct tcaaactgaa ggtctgtgat acttaaaagg gggaaaaaac ccattgaaat
164221 gcagaaggca gagaccatca ctcaaagata ctcatcgctt ggaggtcagt ttatatattg
164281 aacagtgact tgggattggc caaccatcac tcatgccatt aaagtaatat ttcagtttca
164341 actgttttac atgcatttag catgtagacg tattcaattt atagttgtaa acggtctaca
164401 agtghtaaga gccgataccc aagcttcgaa tttgtagggt ttttaagtcta agtcccaatt
164461 cataccggca ctacagggtc gcaagtgtat ggtttttaac agctactttc aaggcgatga
164521 actcggatag aaaatctggg agcaccaggc cttgtttgta agctactttc aaggcgatga
164581 tcctcatcgc caggaggaag ttggtttata cccatcatag ttcctttaac acaagcaatg
164641 cagaatggcc ttcacaagtg tctcctctaa aatgactgtt taaatttgtt tgtttcaaaa
164701 agaggacatc cacgagccgc atgtttccat tatcccttgg aactggagct acaggcagtc
164761 aagggttcc ttacttgggt gctgggacac aactctggcc ctcatggtag aacagcaagc
164821 ccagcaacct ttctagtacc aggattaggt ctttaactttc gtggtctctt gatggcacac
164881 agaaattgtc tagaagtcag aggtatgta cgggtggatg atgtacaccc agtcgccctc
164941 caagcaagcc aaatatgaaa gcaatttttt ttttcaaaaa taaaatagca ccacactgct
165001 ctcccaccag gcgtgtagag attttcccca acaaaatatg acacacatca tatctatgat
165061 tgcttctaaa tgaagaagtc tttaaaagtt ttaacttctt aaggggccaa tatcaatgga
165121 tatattccat ataaataaaa attcatcaga tttgtcttca cctatttttg ttgctgtaac
165181 caaatccatc aaccaacca ctaaccaacc aatcaacca ccaaccaacc aaccaacca

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FIGURE 6PPP



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165241 ccaaccaacc aaccaggttag tctctgtctt gttccagtc ctttttctctg gtgcacaaaa
165301 ggactgattt tacttggttag aagggttatcg ggcaattctc tgtgtctctc ttacaagggt
165361 actaagcatt ctcaggaggg ttcaatcttt atggcccaat cactcccctt cgccccaaaa
165421 caatgtcttg atgaccttcc aacacagtca tggcagatta tgggtctgtag gctttactgg
165481 tgccaagggc tcctgagaat acaacaccaa agtgcctca tcccaagaag gatgcttcag
165541 acagacagtc ccacatgctt tcctctactc ctgggtcatc ccctgtattc catacatcta
165601 tatcccccg tccctcttagc tctcctctga gtggcaaaga ggcattctccg acttaacgag
165661 atgcaaggca gagttctagc tccatctgcc atccccacca cacacctccc aaacaaacct
165721 actcccttcc tcctgccagc tcgggaacgg gcaacttcac ttctcgtttc atctaagcca
165781 aatgcctgaa tcatccttta tccctctttg cccacctgc aagatttcac aagtccttaa
165841 atattcctga atctatctac tcttagttac tgtaactgat ggggtgcagtt ctcaacaagg
165901 aactcttctg tcccggcact acctgcattc agccatgtct agatācattt ttcaattgtg
165961 tctgcgtaga caaggggtag atgtaccacc agtatctagc aggaagatgc atagacaagg
166021 ggtagatgta ccaccagtat cttagcaggaa gaggccaggg atattgatag acattctata
166081 atgcacacag cagctcctat catcaaagac tgtccagctc aaaatgtcaa tggcattgag
166141 aaactgagct ctattccaag ccagtagaat ctctccaaaa aaaccttctc aaaacaactt
166201 cctaactgtt ttccctgatt ttctactctt aattgctctg ctcgatgaaa acaactaaag
166261 ttatcagcag aaatacagag tgtgaccac tagagtgtt tgtcttgtgt catggcctgt
166321 aggcccttgc ctactccact ggccccgggc cagctcctac attctcatcc caccaaattc
166381 ctacgtcaga gccctaagcc ctcagggtgac tctgctagag acagactcta cggtagtaac
166441 tgaagggttaa gtgagcccg tgaagcctgt ctctcatcca ctctgctgtg aagcttgctc tcccatccac
166501 aagacacacg gaagcttgct atccacacag aaaaaggacc tcaactggaat ttgaccttgc
166561 tctgctgtga gaagatggcc atccacacag ggactttgag aaaagaaacg tcagcagctt
166621 tggaactctg atcttggcct catagtctta aaagcttggg ctaatacatt caaccttgct
166681 aagccacca ggctgtggta ctttgttgtg aaagcttggg ctaatacatt caaccttgct
166741 accttgccaa gttccagttc actggccatc agtccactta caccacagcc cttgccctcc
166801 ctcttctgaa ctgccattag ctgaccctta ataaccctta gtcaaaatgc caccctcccc
166861 aggagggact gtgttactcc atccttctct gattttgagg acagccccat ggttggcatt
166921 aaccaagctg cctaccctct ttgcttactg gtctccttga cccagtgcag aaacctctca
166981 gtcttgcccc ttgtcgaatc aggataagat aatctgtgtg gcttatatct cttaaactca
167041 aaacaaggaa aggtaggggg tctgtgaaca tgctttgccc catgaccagc ttccctctgc
167101 cgcttctcca aagagagcta ccatacttat gcctacctta gtttcccaag agcccatcca
167161 gggcaggagg gaatcattac atgtaacatc tagaatgagt acttccttat attctttcac
167221 tttaggggagc agcaaagggt caagggttac gtaaagtaca ggtatggggg catcacctg
167281 atatgatgaa gcaccaagga actcccaat gttaactatc tagccacaga gcaggtaagg
167341 gtatgctcca gttagtttta cgagggtcaac tctgaacaga ggaaacaaaa gcaagcagta
167401 aaggactatg aggcacgtgg gtttgtgtg tgtacagccg agcagtcaca gatgcctcac
167461 taaggagggtg gcatggggac taagagtgc tggagttagc catgggaaat tcaggcaaaa
167521 agcaaggaag gtctctctga actggtgagg aacagcagtc gtcagtcagt attactgtcc
167581 gttatttctc tacactggcc ccaggcaggt gcttttgaat gactggctgt ttgcaaaggg

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FIGURE 6QQQ

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167641 aagtccagat acagatggcc gaatgagggg ccacgagcct gtgcaggaca tacagataat
167701 ggaacaggaa ccttgcaatg ctgagaccta ctacgtgacg ggtgcttaac agcttttgag
167761 gttaacggtg ggaatttctg agagaatccc aaagagagct agctgggtgc ttgaggccaa
167821 caagggcaag gcttataagt caggggcacc ccagaaagga ggcacacccc agaaaggagg
167881 cagcttctaa gaaagaggaa aagagagaaa gcaggcaagc ctgagaaatc aggcttgggt
167941 ggcctgaaaa ggcagaccat gatgtgtgtg gtgggaaagc agggcaggac tcctcctcct
168001 tctggaggaa tacatgtgct ggcactggga catccagctt caaccccagg agcccaggcc
168061 cagcatgacc tcctaacgca ctgttttagta gacagggtag agcctttaag aatggtggct
168121 cgatggaggc cctgtcccat cctccaagat gtctaaaggg ggtgggactg gctaagtcct
168181 tccttctctt cctcaccccc tcacatcca acctcctcca aaaacatcaa atattttctt
168241 ccataaataa ttgcaacagg atgccattgc ttctctcaa gaaacaatgg cctgattgtg
168301 ccctgteega eacgggcccc gccccagcae acacaaaggg tggctttcag aagccctget
168361 gtagagaatg ggggtacacc tcttttctt ccttctgtac caagtccact gccctccacc
168421 aggaaaggac atcaggaagg ggctgtctacc acaggaataa ttcccatcag aggacagcta
168481 tcattcacct gccttttagat tgccctttgg ccacctctag aaagttcttc gttctgggtg
168541 acagaagagc acctattggc tctaaaatcc aacacacaca cacatacagt tttaggctgg
168601 agatatctat aatttttttt tctaattttt aaacttattt gaaattgtca ttaattaact
168661 tttaaaatat ttgaaatcct agcattcagg aggcagaggc tggacaattg cccacattt
168721 gaggccagtc tgggtatacac tgcaagttta ggtcagccag gcctatgtag tgagctcctg
168781 tctcaaaaaa aaaatacata agtaataaaa aattataaat agataataat atagtcctat
168841 tttacgtgta catcttcagt ttcacaattt gagataaagt gaatacagat attttcattc
168901 agtatctgtg gtagtgccaa cactggatgc tcacacagge tcatgcatgt gaacatctgg
168961 tccccgtggc tggcacagtt tgggaaggtt atggaacctt taggaggtgg agtcttgctg
169021 gaagaagtga gctaagccac tgggtgcaga ctcgagggt gatagctggg cccacttcc
169081 tgtccgctct cctgtttctt caccacctc cacttcctaa gtacaggaag cgcttcatct
169141 agcttctctg ccctgccacc acagcatccc agattaattc catggaaact ctaagtcaaa
169201 ataagccctt tattacttaa gttgtttttg taacactaat caagtgtgtt tcttggttaa
169261 aaaggacagg ctggactaaa ggattcaatt tcagcactta aggggctgga gagatgagag
169321 agcctgctgc tggggctgtg ggctgggata agttgaggcc cgagttagt tctcagcacc
169381 catgtttggt tcccaacatt ccatgttcac cccaggcctc caagggcctc cacacacata
169441 gatataccca ccctgagata ttcgcatgca tataaataaa cataaaataa atattttaag
169501 aacccatcac tttgcagcca tggcttgaca aacaggctct ttggtgtctt cctcacatag
169561 gtgcaagagg aactcaggca ggggtgttga gtttttggat tttgcactta tttattttatt
169621 tattggtggt actctctgtt tattggggga gttgtggtgg gttgccattt gtaacatttc
169681 cattaaagat gttaaaaggc tgccttcccc ttttcaaaga ctcagactga tcaactctccc
169741 agccagaggc ttctgtcagc tactaaaggg ttcctttccc ttctatttta tggcctttct
169801 cccatccact tctgctttgt tcttttaatt aaaatgaaat gtaggcctc catggctgag
169861 atgctaataa ggccctgaa agtcatctgt gagcacatcc actcttgttt aaagagccat
169921 gtaaacagac cacagacggc tacagagagc aacgctgcac agggcaagga aaagggaatc
169981 tggctgcacc gtacagtgt acgttgaagt gatttatcac ttatgccagg aggaggaact

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FIGURE 6RRR

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170041 gaaacacaaa cgcaatttca agtttaagca tggcgtctcc acaggatctt ccatagcaag
170101 cactctgcac tcggggggtc cctgtcagga aactcctgga caacggttgg tttgccgtct
170161 gatccacttc agttacctca ccaaacattc aagagggtact ttctgatgtg tgtgggcttt
170221 agcgctaggt tgatacaaaa cagtacctgg atctgtactg gaagtcaact atatttgctg
170281 ccaaatccat tgtaactggc tctgcatgga gccatccgtg tgagagaggc tgatgtgtct
170341 gccaccactc tgcagacact ggaaacagcg caggaccaat ctgtatccat cgttcctacc
170401 tgtttctcag tgggtaacat tctcaaagca ttttcagatg aagaatttag tcagacagac
170461 agacagatgg agacacggat cactggaaga ctgctgtatg gggccacatg gggaaacact
170521 gggttagtca ggaagacacg gcggtttcta cagggaagt ctgggtgtcc ctttgaggtt
170581 cttgtgtgag aaagttgtcc ccaaggtatc agtgtggga gatacaagtt ttttgggttt
170641 ttttgtttgt ttgtttgctt gtttgtttgt ttgtttcaag acagggtttc tctgtgtagc
170701 tctggctgtc ctggaactca cttttagtag caggctggcc tcgaactcag aaatccgctt
170761 gtctctgcct cctgagtgtc gggattaaag gcgtgcgcca ccacgcccag gtgggagata
170821 caagttttaa gaggtgggcc tggtagtagg ttcttaggcc actgggtacc ctgtcctcag
170881 agattaaagt aattctcaca agagggttag agaaacgggc caagtgtgac ctctctccac
170941 atctgcttct tatgtttact tgctctcagg ttctgtcac tgactcgagc aagagcaacc
171001 cttaccatag ctgcactatg atgtttggac ttcaaaacca aactctggac attaactaag
171061 atttctcttt ttaaaatcag taatacactg ttgactaaca atgaatgaat gaagcagagt
171121 aagtaggctg aggatggact ggttcaagtt atcttggcag gcagtgaagt tgggtagtgt
171181 acggcttccc tggcatgtgg ccctagggag accaggacag aagaatattg acgcagagtg
171241 tgagaggcca atcaaggaag tgtgggggct gagatatgtg cttctttact acctaggaat
171301 ctacgagaat ctcttcaggc tcagtcgagg cccccaaac ggcaagcctg tctaagtaca
171361 ggaaacaggc aagattaata tggaaatgtg gcgcaaacca attagctcaa aaatttccac
171421 aaccccatgt attagccctc tgctcagctc agggagataa tgagaacaca taacggaagc
171481 tcccagttca ccaatgcaac tggggagcgg ggggggatgg gtacctcaac cactcttaat
171541 gagtctgtag actaagataa cagaatggca gtcttccatc aacatgaggt aaagctagca
171601 tggcacctca gcctttcaaa gttactgttc actgaaatgt tattagaaaa attgccaatt
171661 gtgataaagc ctatggatca aacactactc ccattgcaag gaacattcat aaacagaaag
171721 ctgttgtcag tccccgaaac ttaaactgta tagagcagag aaaacctgga agaggggaagc
171781 gccataatac ggatgagaaa acagggtcag gggctcgtaa atggcagatc aggaaggaat
171841 cccatccgcc ttggagttgg tgatcttgta atgttcagag aatggactca tttcaactca
171901 caggttcggg gtgaccacg tggctgtgta agcacgtgc ttactgtatg gtgctacaca
171961 agtgagggtc ctcataagct gcagagacac agaaaagtct caagggacag gtgggtgcat
172021 gtgtccaaga cctggctcag cagttaatac gtccagggtg tggcttgtgc tctgcttcat
172081 tagtgtgttg ccagcgacta ggaatgtgac ggctaccacc ttgctgtttg gactcatttc
172141 atggggtaac tgcagcaggc acagggaatg agctaagaca gaccctgggt gagggaggca
172201 gctcatcttc aatgcccgga gagcacaacc tatctgatct gatatactct ccagtttaca
172261 aactactgac aatcacatca agtgaagggc agctgcagcc acagctctcc cttgttcaca
172321 gtttgccttc cttggttcta gttacctgaa ggcaactatg acataacaat attaaatgga
172381 aaattacaga aataaagtag ttccttggcc tcaagttgcc tgccactgga agttacagga

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FIGURE 6SSS

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172441 agccatcttg ttgtcctgct ctgtaagggt cctcccttcc tgcaacggat ccaggctgta
172501 tacccaacca tcggctagcg acgtcataga gatctgagta gaacaagtgc tgttgttcaa
172561 gtacccttga ctttacttaa cagtgacccc caaacgggaa aaagagtagt gttggcaact
172621 tattacagcc aaaaacatgt tattacaatg ttttttatg actgctgtat tgatactgtt
172681 aattgctggg tataattaag ctctgttata gatactgatt tataggaatt agcagcatac
172741 atcaggtttg gtggatttta tggtttcagg aatctactac agatctttga aagtatctcc
172801 ctcacaggga gagagactac tgtaccattg ctcttcaatg gtgactccta atactggcat
172861 atagacagct ctgctgacct tttagaagtg ccagagaaca ggcactctgg acacagcgct
172921 gctcttggcc tcgagggatc tgcaagaagg aatggaggga aggatatgtc tctggggacc
172981 agcttctcct ttgaacatgc aggaactaat gagacgcttt ttgaaggagt ccagggtgagt
173041 gacacctatt aaagggtgctt agttaatgct catcccccata aacgcccatt acggcgacag
173101 gttcccacta ctcagccgga acgtttgagc tctagatgct cctctgaaga aatgggctgaa
173161 aaatcaggga gagatgctaa acccaaacac agtagcagtg ctggcaggag atgagccagg
173221 ctgggtgagct gttcgtaaac cagctgtccc cgcccccaag actggagagt acagagaatt
173281 ccatgcaccc agggctcgtct taagacatga acatgcttcc agagctgcat ccctaagaaa
173341 ctctacaaa cctgctccag accatgaccc tgcaggctct gtctcacccc tgcccttcca
173401 ctcagctgct cctgagttac agcctggcta aaatagcaat gctacatttt ctgccatttg
173461 ggggcccactg aggcaaatga tcatgttgaa ggggtaactg gctattcact caaacctctg
173521 cattcctcag tgagaggaca gtctcagagg atcccaccag gatgtgctgg ctctgcatgg
173581 tgggtgtcag aactacattc gatttgcagg taccatatgg tgtttgcggg gctggaaccc
173641 tgcttgtggg tattgaaaat cacgtactgg agtcaggag cgttgtgagt acaaacattt
173701 cagagtgttg agagtgttg gtgggggttt aggaacaagg caggctctga cttaccagaa
173761 ctgcagcttt tattctgaag tttcttttaa gaaccaagat taggggctgg agagatggct
173821 cagaggttaa gagcacccga ctgctcttcc gaaggtcctg agttcaaacc ccagcaacca
173881 catggtggct cacaaccatc tgtaatgaga tctgactccc tcttctgggg tgtctgaaga
173941 cagctacggc gtacttacat agaataaata aataaataaa tctttaaaaa aagaaaaaaa
174001 ggaaccaaga ttaggcattt gattcattaa acaggacagg ggatcaaata cctccgttgg
174061 gctctcgaga acatgacagg gtgggggtgtg cagataagaa ggctctagct agggtagctg
174121 gaatccctct ttcaacgatg gcgaagcact ggcaccgta gaaagaagga atgatacgaa
174181 tcagcccact attctgaact atgtccctgc ccagacacag aggcacatgc tgggcctgca
174241 gcaaatagcc ctggagccac actcgtggtt ggcgtgcaga ggaggaacca acccatcaga
174301 actctgtccg tgtgggtgtg tgtaggtgcc tgtgggtgaag gtcagaggtc aactcagggtg
174361 tccaatccag gctccttttg aacttctagc ttagtttgtc aacactggca gctgaattgg
174421 gtttgtttgt ttgttttttg agatgtgatc ttgatctgca gcccaggctg ggcttgaatt
174481 c

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FIGURE 6TTT

1 aaaggggaatt tcataccaaa taaaaggaat gaagtctggc tccggaggag ggtccccgac  
 exon 1  
 61 ctgcgtgtgg gggctctgt tttctccg cgcgtctcg ctctggccga cgagtggaga  
 121 a|atctgcggg cggggcattg acatccgcaa cgactaccag cagctgaagc gcctggagaa  
 exon 2 Primer 1  
 181 ctgcacgggtg atcgagggtc acctccacat cctgctcacc tccaaggctg aggactaccg  
 241 cagctaccgc tttccaagc tcacgggtcat caccgagtag ctgctgctgt tccgtgtggc  
 301 tggccttgag agccttggcg acctctccc caatctcacg gtcacccg gctggaagct  
 361 ctctacaac tacgccctgg tcattctcga gatgaccaac ctcaaggaca tcgggctcta  
 421 caacctgagg aatattaccg gggggggccat caggatcgag aagaatgcYg acctctgcta  
 SNP469  
 481 cctctctacg gtggactggc cctgacatc ggatgccgtg tccaataact acatcgtggg  
 541 caacaagccc cctaaggaat gcggggactt gtgccaggag acgctggagg agaagccgct  
 601 gtgtgagaag acgaccatca acaacgagta caactatcgc tgcctggacca cgaaccgctg  
 Primer 2  
 661 ccagaaa|atg tccccgagcg tgtgcgggaa gcgggcgtgc acagagaacc acgagtgcgtg  
 exon 3 Primer 3  
 721 ccaccccgag tgcctgggca gctgcagcgc acccgacaac gacacRgcct gtgtggcctg  
 SNP766  
 781 ccgccactac tactacgccg gagtctgctg gccagctgc ccaccaaca cctaccgctt  
 841 cgagggtg cgctgcgtgg accgcgactt ttgcgccaac atccccagtg cggagagcag  
 901 tgactccgag ggctttgtga tccatgatgg Sgagtgcag caggagtgc cttcaggctt  
 SNP931 Primer 4  
 961 catccgcaat ggcagccaga gc|atgtactg tatcccttgc gaaggccctt gccccaaagt  
 exon 4  
 1021 ctgtgaggaa gagaagaaga caaagaccat tgattctgtc acttctgtc agatgtcca  
 1081 aggatgcacc atctcaagg gcaacctgct cattaacatc cgacgcggc|a acaacatgc  
 exon 5  
 1141 ctgcgagcta gagaacttca tggggctcat cgagggtgtg acgggctacg tgaagatccg  
 1201 ccactcccat gccttggtct cctgtcctt cctgaaaaat ctccgccaga tcctagggga  
 1261 ggagcagctg gagggg|aatt actccttcta cgtccttgac aaccagaact tgcagcagct  
 exon 6  
 1321 gtgggactgg gaccatcgca acctgacct caaagctggg aaaatgtact ttgctttcaa  
 1381 tcccaaattg tgtgtctccg agattaccg catggaggaa gtgacaggga ctaaagggcg  
 1441 ccagagcaaa ggggacataa acaccaggaa caatggagag agagcctcc|t gtgaaagtga  
 exon 7 Primer 5  
 1501 cgctctKcac ttcacctcca ccaccacgtg gaagaaccgc atcatcatca cctggcaccg  
 SNP1507  
 1561 ataccggccc cctgactaca gggacctcat cagcttact gtctactaca aggaagcg|cc  
 Primer 6 exon 8  
 1621 ctttaaaac gtcacggagt atgatgggca ggatgcctgt ggctccaaca gctggaacat  
 Primer 9  
 1681 ggtggacgtg gacctccctc ccaataagga cgtcagcct ggcatctac tgcattggct  
 1741 gaagccctgg acacagtacg cYgtttacgt cRaggccgtg accctcacca tggtggagaa  
 Primer 7 SNP1762 SNP1772

FIGURE 7A

1801 tgaccacatc cgtggggcca agagtgagat ctgtacatt cgcaccaatg cttagttcc  
 Primer 8 exon 9

1861 ttccattccc ctggatgtcc tctcagcatc aaactcctct tctcagctga tagtgaagt  
 1921 gaacccgccc tccctgccc atggcaacct gagctactac atcgtgcggt ggcagcgcca  
 1981 gcctcaggac agctatctct accggcataa ttactgtcc aaa|  
 Primer 10

ggtgagg gggacatggg acacctgtgg ctctgactcc cgagccctat gctacgcatt cagcatcagg ctgctgtgt  
 Intron 9  
 gtgcagcctt ggccatggc acaggtgcta accgYggtgt cYtcccgtac cggttgggta acttggctct  
 SNP9i112 SNP9i119

ccttgggctg ctctttcca agca  
 |gacaaaa tccccatcag  
 exon 10

2041 gaagtatgct gatggcacca ttgatgtcga ggaggctaca gagaaccca agactgaagt  
 2101 gtgtggcggg gagaaggac catgctgtgc ttgccccaa acagaagctg agaagcaggc  
 2161 agagaaggag gaggtgagt accgcaaggt ctgcgagaac ttctgcaca atgccatctt  
 Primer 11

2221 tgtgccaga| cctgaacgga agcggaggga ggtcatgcag gtcgcaaYa ccaccatgtc  
 exon 11 Primer 12 SNP2269

2281 cagccggagc agaaacacca cagtgggtga cacctacaat gtcacggacc cagaggagct  
 Primer 13

2341 tgagacagag taccctttt ttgagagcag agtggataac aaggagagaa ctgtcattc  
 2401 caacctccgg cctttactt tgtaccgaat tgacatccac agctgaacc atgaggctga  
 2461 gaagctgggc tgcagtgcct ccaacttgt cttgcaaga accatgcctg ca|GGTAT  
 Intron 11

GGTGTGATCCAGTCACTCCATTTCCTAATTCACAGCCTTGATTTGTAC  
 AGATGGAGGCTGACACCCAGGGCAATGACCCTTACTCTCAGTCTTGCTTA  
 TTAAAGAATGAGTGGTCTTTTGTAGGCAGCTCACTAGTCCAGCAGCCAG  
 GAATGGAGTTCATTATAGCAACCCCACTCTCTCCCAGTCTCTCCATACA  
 GAGTGCTTGAGAGCAGGGAATCAATTCAGGGTCTACACTTTCCCTCTCCT  
 TGGTTCATGTTGTGCATTGCCGTGGGCCCTTTTTTTTGCCCATTTATGCAA  
 GGGAAATTTGCCAGGTCTCTCCTGAGTTCTCAGAGATT  
 TGTGAAATCCTCAGTTGGCTGCCCTGAATCAAAGTGAGTGTAGCTCCTGA  
 AGGTCAGCTCCCAGAGCAGCTTCGCGTCTGCTTGTGTTGGTCCTCACCTTC  
 CTCTTCTTTTAGAAGCTACCTGTGGCCCAGACAGCAAGCCATC(N)<sub>n</sub>AAAAA  
 AAAAAAAGAAACCTACTGT  
 GTATGTGAGGTCAGGTCAGGAGAAATGAACGCAGGTACCGTCTGCAGTCC  
 TGTATGCATGGTTGAAGAGGGTATTCTTAGGTTTAA  
 TCCAGCATTTTTTGTCTTTTTTGGGGGACTTGAGTCTAACTTCATTGCTTGT  
 TTCAATTGTTGCACA|gaaggagc  
 exon 12

2521 agatgacatt cctgggccag tgacctggga gccacggcct gagaactcca tctttttaa  
 2581 gtggccagaa cctgagaatc ctaatggatt gattctaag tatgaaataa aatacggatc  
 2641 acaagtcgag| gatcagcggg aatgtgtgtc cagacaggag tacaggaagt atggaggggc  
 exon 13

2701 caagctgaac aggtcaacc cggggaacta cacggcccg attcaggcca cctctctctc

FIGURE 7B

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